

Bibliographie du LRDE

22 janvier 2023

Ce document contient la liste des articles acceptés écrits ou co-écrits par les membres du LRDE depuis 1999.

Le tableau suivant résume de manière quantitative le document. « Journal » et « conférences » ne font référence qu'aux publications relues par des pairs. Le corps de ce document est consacré à la bibliographie détaillée classée selon différents critères.

Année	Chapitre de livre	Journal	Conférence internationale	Conférence nationale	Rapport de recherche
2024	0	0	0	0	0
2023	0	1	2	0	0
2022	0	21	26	5	0
2021	0	8	23	0	0
2020	0	5	11	0	0
2019	0	9	21	2	0
2018	1	5	13	2	0
2017	1	4	18	3	1
2016	0	4	11	0	3
2015	0	1	18	1	0
2014	0	4	15	1	0
2013	0	2	13	0	0
2012	1	2	7	0	1
2011	0	1	8	1	1
2010	2	2	9	0	0
2009	0	1	9	0	0
2008	0	1	14	0	0
2007	0	1	12	1	0
2006	1	6	14	0	1
2005	0	2	10	0	1
2004	0	2	7	0	3
2003	0	1	9	0	0
2002	0	0	2	0	0
2001	0	0	8	0	0
2000	0	0	7	1	0
1999	0	0	1	1	1
Total	6	83	288	18	12

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1 Publications classées par catégories de publication

1.1 Année 2024

1.2 Année 2023

1.2.1 Revues

1. Minh Ôn Vũ Ngọc, Edwin Carlinet, Jonathan Fabrizio, and Thierry Géraud. The Dahu graph-cut for interactive segmentation on 2D/3D images. *Pattern Recognition*, 136(109207), April 2023. doi:10.1016/j.patcog.2022.109207.

1.2.2 Conférences Internationales

1. Sven Dziadek, Uli Fahrenberg, and Philipp Schlehuber-Caissier. Energy problems in finite and timed automata with Büchi conditions. In *International Symposium on Formal Methods (FM)*, Lecture Notes in Computer Science. Springer, March 2023. Accepted.
2. S. Saouli, S. Baarir, C. Dutheillet, and J. Devriendt. CosySEL: Improving SAT solving using local symmetries. In *24th International Conference on Verification, Model Checking, and Abstract Interpretation*, Boston, USA, January 2023. accepted.

1.3 Année 2022

1.3.1 Revues

1. Alessandro Abate, Uli Fahrenberg, and Martin Fränzle. Introduction to the special issue on distributed hybrid systems. *Leibniz Transactions on Embedded Systems*, 8(2):00:1–00:3, December 2022. doi:10.4230/LITES.8.2.0.
2. Loïca Avanthey and Laurent Beaudoin. How to boost close-range remote sensing courses using a serious game: Uncover in a fun way the complexity and transversality of multi-domain field acquisitions. *Remote Sensing*, 14(4), 2022. URL: <https://www.mdpi.com/2072-4292/14/4/817>, doi:10.3390/rs14040817.
3. Laurent Beaudoin and Loïca Avanthey. How to help digital-native students to successfully take control of their learning : A return of 8 years of experience on a computer science e-learning platform in higher education. *Education and Information Technologies (EIT) [Springer Nature]*, -():1–21, 2022. doi:10.1007/s10639-022-11407-8.
4. Laurent Beaudoin, Loïca Avanthey, Corentin Bunel, and Charles Villard. Automatically Guided Selection of a Set of Underwater Calibration Images. *Journal of Marine Science and Engineering (JMSE) [MDPI]*, 10(6):1–15, 2022. doi:10.3390/jmse10060741.
5. Nicolas Blin, Edwin Carlinet, Florian Lemaitre, Lionel Lacassagne, and Thierry Géraud. Max-tree computation on GPUs. *IEEE Transactions on Parallel and Distributed Systems*, 33(12):3520–3531, March 2022. doi:10.1109/TPDS.2022.3158488.
6. Nicolas Boutry, Rocio Gonzalez-Diaz, Laurent Najman, and Thierry Géraud. Continuous well-composedness implies digital well-composedness in n -D. *Journal of Mathematical Imaging and Vision*, 64(2):131–150, January 2022. doi:10.1007/s10851-021-01058-8.
7. Nicolas Boutry, Laurent Najman, and Thierry Géraud. Some equivalence relation between persistent homology and morphological dynamics. *Journal of Mathematical Imaging and Vision*, 64:807–824, September 2022. doi:10.1007/s10851-022-01104-z.
8. Manfred Droste, Sven Dziadek, and Werner Kuich. Greibach normal form for ω -algebraic systems and weighted simple ω -pushdown automata. *Information and Computation*, 285(B):104871, May 2022. doi:10.1016/j.ic.2022.104871.
9. Uli Fahrenberg, Christian Johansen, Georg Struth, and Krzysztof Ziemiański. Posets with interfaces as a model for concurrency. *Information and Computation*, 285(B):104914, May 2022. doi:10.1016/j.ic.2022.104914.

10. Uli Fahrenberg. Higher-dimensional timed and hybrid automata. *Leibniz Transactions on Embedded Systems*, 8(2):03:1–03:16, December 2022. URL: <https://ojs.dagstuhl.de/index.php/lites/article/view/lites-v008-i002-a003>, doi:10.4230/LITES.8.2.3.
11. Uli Fahrenberg and Axel Legay. Featured games. *Science of Computer Programming*, 223:102874, November 2022. URL: <https://www.sciencedirect.com/science/article/pii/S0167642322001071>, doi:<https://doi.org/10.1016/j.scico.2022.102874>.
12. Romain Hermay, Guillaume Tochon, Élodie Puybareau, Alexandre Kirszenberg, and Jesús Angulo. Learning grayscale mathematical morphology with smooth morphological layers. *Journal of Mathematical Imaging and Vision*, April 2022. doi:10.1007/s10851-022-01091-1.
13. Mouloud Iferroudjene, Corentin Lonjarret, Céline Robardet, Marc Plantevit, and Martin Atzmueller. Methods for explaining top-N recommendations through subgroup discovery. *Data Mining and Knowledge Discovery*, 313(118752), November 2022. doi:10.1007/s10618-022-00897-2.
14. Daniel Maldonado-Ruiz, Jenny Torres, Nour El Madhoun, and Mohamad Badra. Current trends in blockchain implementations on the paradigm of public key infrastructure: A survey. *IEEE Access*, 2022. URL: <https://ieeexplore.ieee.org/abstract/document/9687536>, doi:10.1109/ACCESS.2022.3145156.
15. Raghav Mehta, Angelos Filos, Ujjwal Baid, Chiharu Sako, Richard McKinley, Michael Rebsamen, Katrin Dätwyler, Raphael Meier, Piotr Radojewski, Gowtham Krishnan Murugesan, Sahil Nalawade, Chandan Ganesh, Ben Wagner, Fang F. Yu, Baowei Fei, Ananth J. Madhuranthakam, Joseph A. Maldjian, Laura Daza, Catalina Gómez, Pablo Arbeláez, Chengliang Dai, Shuo Wang, Hadrien Reynaud, Yuanhan Mo, Elsa Angelini, Yike Guo, Wenjia Bai, Subhashis Banerjee, Linmin Pei, Murat AK, Sarahi Rosas-González, Ilyess Zemmoura, Clovis Tauber, Minh Hoang Vu, Tufve Nyholm, Tommy Löfstedt, Laura Mora Ballestar, Veronica Vilaplana, Hugh McHugh, Gonzalo Maso Talou, Alan Wang, Jay Patel, Ken Chang, Katharina Hoebel, Mishka Gidwani, Nishanth Arun, Sharut Gupta, Mehak Aggarwal, Praveer Singh, Elizabeth R. Gerstner, Jayashree Kalpathy-Cramer, Nicolas Boutry, Alexis Huard, Lasitha Vidyaratne, Md Monibor Rahman, Khan M. Iftekharuddin, Joseph Chazalon, Elodie Puybareau, Guillaume Tochon, Jun Ma, Mariano Cabezas, Xavier Llado, Arnau Oliver, Liliana Valencia, Sergi Valverde, Mehdi Amian, Mohammadreza Soltaninejad, Andriy Myronenko, Ali Hatamizadeh, Xue Feng, Quan Dou, Nicholas Tustison, Craig Meyer, Nisarg A. Shah, Sanjay Talbar, Marc-André Weber, Abhishek Mahajan, Andras Jakab, Roland Wiest, Hassan M. Fathallah-Shaykh, Arash Nazeri, Mikhail Milchenko, Daniel Marcus, Aikaterini Kotrotsou, Rivka Colen, John Freymann, Justin Kirby, Christos Davatzikos, Bjoern Menze, Spyridon Bakas, Yarin Gal, and Tal Arbel. QU-BraTS: MICCAI BraTS 2020 challenge on quantifying uncertainty in brain tumor segmentation — Analysis of ranking scores and benchmarking results. *Journal of Machine Learning for Biomedical Imaging (MELBA)*, 26:1–54, September 2022.
16. Maelle Moranges, Marc Plantevit, and Moustafa Bensafi. Using subgroup discovery to relate odor pleasantness and intensity to peripheral nervous system reactions. *IEEE Transactions on Affective Computing*, pages 1–16, May 2022. doi:10.1109/TAFFC.2022.3173403.
17. Alexandre Kirszenberg, Antoine Martin, Hugo Moreau, and Etienne Renault. Go2Pins: A framework for the LTL verification of Go programs (extended version). *International Journal on Software Tools for Technology Transfer (STTT)*, 2022.
18. Tianyi Shi, Nicolas Boutry, Yongchao Xu, and Thierry Géraud. Local intensity order transformation for robust curvilinear object segmentation. *IEEE Transactions on Image Processing*, 31:2557–2569, March 2022. doi:10.1109/TIP.2022.3155954.
19. Léonard Tschora, Erwan Pierre, Marc Plantevit, and Céline Robardet. Electricity price forecasting on the day-ahead market using machine learning. *Applied Energy*, 313(118752), May 2022. doi:10.1016/j.apenergy.2022.118752.

20. Luca Veyrin-Forrer, Ataollah Kamal, Stefan Duffner, Marc Plantevit, and Céline Robardet. On GNN explainability with activation rules. *Data Mining and Knowledge Discovery*, pages 1–35, October 2022. doi:[10.1007/s10618-022-00870-z](https://doi.org/10.1007/s10618-022-00870-z).
21. Luca Veyrin-Forrer, Ataollah Kamal, Stefan Duffner, Marc Plantevit, and Céline Robardet. In pursuit of the hidden features of GNN’s internal representations. *Data & Knowledge Engineering*, 142:102097, November 2022. doi:[10.1016/j.datak.2022.102097](https://doi.org/10.1016/j.datak.2022.102097).

1.3.2 Conférences Internationales

1. Nathalie Abadie, Edwin Carlinet, Joseph Chazalon, and Bertrand Duménieu. A benchmark of named entity recognition approaches in historical documents. In *Proceedings of the 15th IAPR International Workshop on Document Analysis System*, volume 13237 of *Lecture Notes in Computer Science*, pages 445–460, La Rochelle, France, 5 2022. Springer. doi:[10.1007/978-3-031-06555-2_30](https://doi.org/10.1007/978-3-031-06555-2_30).
2. S. Akshay, Hugo Bazille, Blaise Genest, and Mihir Vahanwala. On robustness for the Skolem and positivity problems. In Petra Berenbrink and Benjamin Monmege, editors, *39th International Symposium on Theoretical Aspects of Computer Science STACS*, volume 219 of *LIPICs*, pages 5:1–5:20. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, March 2022. doi:[10.4230/LIPICs.STACS.2022.5](https://doi.org/10.4230/LIPICs.STACS.2022.5).
3. Nassim Bouarour, Idir Benouaret, and Sihem Amer-Yahia. Learning diversity attributes in multi-session recommendations. In *2022 IEEE International Conference on Big Data (Big Data)*, pages 1–10, Osaka, Japan, December 2022. IEEE. accepted. doi:[10.1109/BigDataXXXX](https://doi.org/10.1109/BigDataXXXX).
4. Marc Demoustier, Ines Khemir, Quoc Duon Nguyen, Lucien Martin-Gaffé, and Nicolas Boutry. Residual 3D U-net with localization for brain tumor segmentation. In *International MICCAI Brainlesion Workshop*, volume 12962 of *Lecture Notes in Computer Science*, pages 389–399. Springer, 2022. doi:[10.1007/978-3-031-08999-2_33](https://doi.org/10.1007/978-3-031-08999-2_33).
5. Nicolas Boutry, Gilles Bertrand, and Laurent Najman. Gradient vector fields of discrete morse functions and watershed-cuts. In *Proceedings of the IAPR International Conference on Discrete Geometry and Mathematical Morphology (DGMM)*, Lecture Notes in Computer Science, 2022.
6. Antonio Casares, Alexandre Duret-Lutz, Klara J. Meyer, Florian Renkin, and Salomon Sickert. Practical applications of the Alternating Cycle Decomposition. In *Proceedings of the 28th International Conference on Tools and Algorithms for the Construction and Analysis of Systems*, volume 13244 of *Lecture Notes in Computer Science*, pages 99–117, April 2022. doi:[10.1007/978-3-030-99527-0_6](https://doi.org/10.1007/978-3-030-99527-0_6).
7. Lamine Diop, Cheikh Talibouya Diop, Arnaud Giacometti, Dominique Li, and Arnaud Soulet. Trie-based output itemset sampling. In *2022 IEEE International Conference on Big Data (Big Data)*, pages 1–10, Osaka, Japan, December 2022. IEEE. accepted. doi:[10.1109/BigDataXXXX](https://doi.org/10.1109/BigDataXXXX).
8. Pierre Duluard, Xinqing Li, Marc Plantevit, Céline Robardet, and Romain Vuillemot. Discovering and visualizing tactics in table tennis games based on subgroup discovery. In *Machine Learning and Data Mining for Sports Analytics - 9th International Workshop, MLSA 2022*, September 2022. Workshop co-located with ECMLPKDD’22.
9. Alexandre Duret-Lutz, Etienne Renault, Maximilien Colange, Florian Renkin, Alexandre Gbaguidi Aisse, Philipp Schlehuber-Caissier, Thomas Medioni, Antoine Martin, Jérôme Dubois, Clément Gillard, and Henrich Lauko. From Spot 2.0 to Spot 2.10: What’s new? In *Proceedings of the 34th International Conference on Computer Aided Verification (CAV’22)*, volume 13372 of *Lecture Notes in Computer Science*, pages 174–187. Springer, August 2022. doi:[10.1007/978-3-031-13188-2_9](https://doi.org/10.1007/978-3-031-13188-2_9).
10. Nour El Madhoun, Emmanuel Bertin, Mohamad Badra, and Guy Pujolle. New security protocols for offline point-of-sale machines. In *36th International Conference on Advanced*

Information Networking and Applications (AINA), volume 450 of *Lecture Notes in Networks and Systems*. Springer, 2022. doi:10.1007/978-3-030-99587-4_38.

11. Baptiste Esteban, Edwin Carlinet, Guillaume Tochon, and Didier Verna. The cost of dynamism in static languages for image processing. In *Proceedings of the 21st International Conference on Generative Programming: Concepts & Experiences (GPCE 2022)*, Auckland, New Zealand, December 2022. doi:10.1145/3564719.3568693.
12. Baptiste Esteban, Guillaume Tochon, Edwin Carlinet, and Didier Verna. Estimation of the noise level function for color images using mathematical morphology and non-parametric statistics. In *Proceedings of the 26th International Conference on Pattern Recognition*, pages 428–434, Montréal, Québec, August 2022. doi:10.1109/ICPR56361.2022.9956218.
13. Uli Fahrenberg, Christian Johansen, Georg Struth, and Krzysztof Ziemiański. A Kleene theorem for higher-dimensional automata. In Bartek Klin, Sławomir Lasota, and Anca Muscholl, editors, *33rd International Conference on Concurrency Theory (CONCUR 2022)*, volume 243 of *Leibniz International Proceedings in Informatics (LIPIcs)*, pages 29:1–29:18, Dagstuhl, Germany, September 2022. Schloss Dagstuhl – Leibniz-Zentrum für Informatik. URL: <https://drops.dagstuhl.de/opus/volltexte/2022/17092>, doi:10.4230/LIPIcs.CONCUR.2022.29.
14. Pierre Guillaume, Corentin Duchene, and Reda Dehak. Hate speech and toxic comment detection using transformers. In *Workshop EGC 2022 DL for NLP*, January 2022.
15. Ataollah Kamal, Elouan Vincent, Marc Plantevit, and Céline Robardet. Improving the quality of rule-based GNN explanations. In *ECML PKDD International Workshop on eXplainable Knowledge Discovery in Data Mining*, pages 1–16, Grenoble, France, September 2022. accepted.
16. Théo Lepage and Réda Dehak. Label-efficient self-supervised speaker verification with information maximization and contrastive learning. In *Proc. Interspeech 2022*, pages 4018–4022. ISCA, September 2022. accepted. doi:10.21437/Interspeech.2022-802.
17. J-L. Mandel, P. Burger, A. Strehle, F. Colin, T. Mazzucotelli, N. Collot, S. Baer, B. Durand, A. Piton, R. Coutelle, E. Schaefer, P. Parrend, L. Faivre, K. Jobard Garou, D. Geneviève, V. Ruault, D. Martin, R. Caumes, T. Smol, J. Ghoumid, F. Ropert Conquer, J. Kummeling, C. Ockeloen, T. Kleefstra, and D. Koolen. GenIDA, une base de données participative internationale permettant de mieux connaître l’histoire naturelle et les comorbidités des formes génétiques de troubles neurodéveloppementaux. In *Assises de Génétique Humaine et Médicale*, February 2022. URL: <http://icube-publis.unistra.fr/7-MBSC22>.
18. Minh Ôn Vũ Ngọc, Nicolas Boutry, and Jonathan Fabrizio. Topology-aware method to segment 3D plan tissue images. In *36th Conference on Neural Information Processing Systems, AI for Science Workshop*, 2022.
19. Jim Newton. Comparing use-cases of tree-fold vs fold-left, how to fold and color a map. In *Symposium on Implementation and Application of Functional Languages*, Copenhagen, Denmark, August 2022.
20. Emmanuel Paviot-Adet, Denis Poitrenaud, Etienne Renault, and Yann Thierry-Mieg. Ltl under reductions with weaker conditions than stutter invariance. In *Proceedings of the 41th IFIP International Conference on Formal Techniques for Distributed Objects, Components and Systems (FORTE’22)*, volume 13273 of *Lecture Notes in Computer Science*, pages 170–187. Springer, June 2022. doi:10.1007/978-3-031-08679-3_11.
21. Florian Renkin, Philipp Schlehuber-Caissier, Alexandre Duret-Lutz, and Adrien Pommellet. Effective reductions of Mealy machines. In *Proceedings of the 42nd International Conference on Formal Techniques for Distributed Objects, Components, and Systems (FORTE’22)*, volume 13273 of *Lecture Notes in Computer Science*, pages 114–130. Springer, June 2022. doi:10.1007/978-3-031-08679-3_8.
22. Michaël Roynard, Edwin Carlinet, and Thierry Géraud. A modern C++ point of View of programming in image processing. In *Proceedings of the 21st International Conference on*

Generative Programming: Concepts & Experiences (GPCE 2022), Auckland, New Zealand, December 2022. doi:10.1145/3564719.3568692.

23. V. Vallade, S. Nejati, J. Sopena, V. Ganesh, and S. Baarir. Diversifying a parallel SAT solver with bayesian moment matching. In *Symposium on Dependable Software Engineering Theories, Tools and Applications*, Beijing, China, October 2022. doi:10.1007/978-3-031-21213-0_14.
24. Didier Verna. ETAP: Experimental typesetting algorithms platform. In *15th European Lisp Symposium*, Porto, Portugal, March 2022. doi:10.5281/zenodo.6334248.
25. Luca Veyrin-Forrer, Ataollah Kamal, Stefan Duffner, Marc Plantevit, and Céline Robardet. What does my GNN really capture? On exploring internal gnn representations. In *International Joint Conference on Artificial Intelligence 2022*, pages 747–752. ijcai.org, July 2022. doi:https://doi.org/10.24963/ijcai.2022/105.
26. Zhou Zhao and Zhenyu Lu. Multi-purpose tactile perception based on deep learning in a new tendon-driven optical tactile sensor. In *2022 IEEE/RSJ International Conference on Intelligent Robots and Systems*, Kyoto, Japan, October 2022. accepted.

1.3.3 Conférences Nationales

1. Baptiste Esteban, Guillaume Tochon, Edwin Carlinet, and Didier Verna. Estimation de la fonction de niveau de bruit pour des images couleurs en utilisant la morphologie mathématique. In *28e Colloque sur le traitement du signal et des images*, number 001-0238, pages 953–956, Nancy, France, September 2022. GRETSI - Groupe de Recherche en Traitement du Signal et des Images.
2. Baptiste Esteban, Edwin Carlinet, Guillaume Tochon, and Didier Verna. Généricité dynamique pour des algorithmes morphologiques. In *28e Colloque sur le traitement du signal et des images*, number 001-0119, pages 477–480, Nancy, France, September 2022. GRETSI - Groupe de Recherche en Traitement du Signal et des Images.
3. Pierre Guillaume, Corentin Duchene, and Réda Dehak. Hate speech and toxic comment detection using transformers. In *Workshop EGC 2022 DL for NLP*, January 2022. accepted.
4. Youcef Remil, Anes Bendimerad, Marc Plantevit, Céline Robardet, and Mehdi Kaytoue. Découverte de sous-groupes de prédictions interprétables pour le triage d’incidents. In *Extraction et Gestion des Connaissances, EGC 2022, Blois, France, 24 au 28 janvier 2022*, pages 411–418, January 2022. In French. URL: <http://editions-rnti.fr/?inprocid=1002754>.
5. Luca Veyrin-Forrer, Ataollah Kamal, Stefan Duffner, Marc Plantevit, and Céline Robardet. Qu’est-ce que mon GNN capture vraiment ? Exploration des représentations internes d’un GNN. In *Extraction et Gestion des Connaissances, EGC 2022, Blois, France, 24 au 28 janvier 2022*, pages 159–170, January 2022. In French, Best paper award.

1.4 Année 2021

1.4.1 Revues

1. Nicolas Boutry, Rocio Gonzalez-Diaz, Maria-Jose Jimenez, and Eduardo Paluzo-Hildago. Strong Euler wellcomposedness. *Journal of Combinatorial Optimization*, 12148:3038–3055, November 2021. doi:10.1007/s10878-021-00837-8.
2. Sharib Ali, Mariia Dmitrieva, Noha Ghatwary, Sophia Bano, Gorkem Polat, Alptekin Temizel, Adrian Krenzer, Amar Hekalo, Yun Bo Guo, Bogdan Matuszewski, Mourad Gridach, Irina Voiculescu, Vishnusai Yoganand, Arnav Chavan, Aryan Raj, Nhan T. Nguyen, Dat Q. Tran, Le Duy Huynh, Nicolas Boutry, Shahadate Rezvy, Haijian Chen, Yoon Ho Choi, Anand Subramanian, Velmurugan Balasubramanian, Xiaohong W. Gao, Hongyu Hu, Yusheng Liao, Danail Stoyanov, Christian Daul, Stefano Realdon, Renato Cannizzaro,

- Dominique Lamarque, Terry Tran-Nguyen, Adam Bailey, Barbara Braden, James East, and Jens Rittscher. Deep learning for detection and segmentation of artefact and disease instances in gastrointestinal endoscopy. *Medical Image Analysis*, 70(102002), May 2021. doi:10.1016/j.media.2021.102002.
3. Yves Christian Elloh Adja, Badis Hammi, Ahmed Serhrouchni, and Sherali Zeadally. A blockchain-based certificate revocation management and status verification system. *Computers & Security*, 104:102209, 2021. URL: <https://www.sciencedirect.com/science/article/pii/S016740482100033X>, doi:<https://doi.org/10.1016/j.cose.2021.102209>.
 4. Badis Hammi, Sherali Zeadally, Yves Christian Elloh Adja, Manlio Del Giudice, and Jamel Nebhen. Blockchain-based solution for detecting and preventing fake check scams. *IEEE Transactions on Engineering Management*, pages 1–16, 2021. URL: <https://ieeexplore.ieee.org/document/9469218>, doi:10.1109/TEM.2021.3087112.
 5. Yoo Jung Kim, Hyungjoon Jang, Kyoungbun Lee, Seongkeun Park, Sung-Gyu Min, Choyeon Hong, Jeong Hwan Park, Kanggeun Lee, Jisoo Kim, Wonjae Hong, Hyun Jung, Yanling Liu, Haran Rajkumar, Mahendra Khened, Ganapathy Krishnamurthi, Sen Yang, Xiyue Wang, Chang Hee Han, Jin Tae Kwak, Jianqiang Ma, Zhe Tang, Bahram Marami, Jack Zeineh, Zixu Zhao, Pheng-Ann Heng, Rudiger Schmitz, Frederic Madesta, Thomas Rosch, Rene Werner, Jie Tian, Élodie Puybareau, Matteo Bovio, Xiufeng Zhang, Yifeng Zhu, Se Young Chun, Won-Ki Jeong, Peom Park, and Jinwook Choi. PAIP 2019: Liver cancer segmentation challenge. *Medical Image Analysis*, 67:101854, January 2021. doi:10.1016/j.media.2020.101854.
 6. Jimmy Francky Randrianasoja, Camille Kurtz, Éric Desjardin, and Nicolas Passat. AGAT: Building and evaluating binary partition trees for image segmentation. *SoftwareX*, 16(100855), December 2021. doi:10.1016/j.softx.2021.100855.
 7. Anjany Sekuboyina, Malek E. Hussein, Amirhossein Bayat, Maximilian Löffler, Hans Liebl, Hongwei Li, Giles Tetteh, Jan Kukačka, Christian Payer, Darko Stern, Martin Urschler, Maodong Chen, Dalong Cheng, Nikolas Lessmann, Yujin Hu, Tianfu Wang, Dong Yang, Daguang Xu, Felix Ambellan, Tamaz Amiranashvili, Moritz Ehlke, Hans Lamecker, Sebastian Lehnert, Marilia Lirio, Nicolás Pérez de Olaguer, Heiko Ramm, Manish Sahu, Alexander Tack, Stefan Zachow, Tao Jiang, Xinjun Ma, Christoph Angerman, Xin Wang, Kevin Brown, Matthias Wolf, Alexandre Kirszenberg, Élodie Puybareau, Di Chen, Yiwei Bai, Brandon H. Rapazzo, Timyoas Yeah, Amber Zhang, Shangliang Xu, Feng Houa, Zhiqiang He, Chan Zeng, Zheng Xiangshang, Xu Liming, Tucker J. Netherton, Raymond P. Mumme, Laurence E. Court, Zixun Huang, Chenhang He, Li-Wen Wang, Sai Ho Ling, Lê Duy Huynh, Nicolas Boutry, Roman Jakubicek, Jiri Chmelik, Supriti Mulay, Mohanasankar Sivaprakasam, Johannes C. Paetzold, Suprosanna Shit, Ivan Ezhov, Benedikt Wiestler, Ben Glocker, Alexander Valentinitzsch, Markus Rempfler, Björn H. Menze, and Jan S. Kirschke. VerSe: A vertebrae labelling and segmentation benchmark for multi-detector CT images. *Medical Image Analysis*, 73(102166), July 2021. doi:10.1016/j.media.2021.102166.
 8. Zhaohan Xiong, Qing Xia, Zhiqiang Hu, Ning Huang, Cheng Bian, Yefeng Zheng, Sulaiman Vesal, Nishant Ravikumar, Andreas Maier, Xin Yang, Pheng-Ann Heng, Dong Ni, Caizi Li, Qianqian Tong, Weixin Si, Élodie Puybareau, Younes Khoudli, Thierry Géraud, Chen Chen, Wenjia Bai, Daniel Rueckert, Lingchao Xu, Xiahai Zhuang, Xinzhe Luo, Shuman Jia, Maxime Sermesant, Yashu Liu, Kuanquan Wang, Davide Borra, Alessandro Masci, Cristiana Corsi, Coen de Vente, Mitko Veta, Rashed Karim, Chandrakanth Jayachandran Preetha, Sandy Engelhardt, Menyun Qiao, Yuanyuan Wang, Qian Tao, Marta Nunez-Garcia, Oscar Camara, Nicolo Savioli, Pablo Lamata, and Jichao Zhao. A global benchmark of algorithms for segmenting the left atrium from late gadolinium-enhanced cardiac magnetic resonance imaging. *Medical Image Analysis*, 67:101832, January 2021. doi:10.1016/j.media.2020.101832.

1.4.2 Conférences Internationales

1. Isabelle Bloch, Samy Blusseau, Ramón Pino Pérez, Élodie Puybureau, and Guillaume Tochon. On some associations between mathematical morphology and artificial intelligence. In Joakim Lindblad, Filip Malmberg, and Nataša Sladoje, editors, *Proceedings of the IAPR International Conference on Discrete Geometry and Mathematical Morphology (DGMM)*, volume 12708 of *Lecture Notes in Computer Science*, pages 457–469, Uppsala, Sweden, May 2021. Springer. doi:10.1007/978-3-030-76657-3_33.
2. Nicolas Boutry, Thierry Géraud, and Laurent Najman. An equivalence relation between morphological dynamics and persistent homology in n -D. In *Proceedings of the IAPR International Conference on Discrete Geometry and Mathematical Morphology (DGMM)*, volume 12708 of *Lecture Notes in Computer Science*, pages 525–537, Uppsala, Sweden, May 2021. Springer. doi:10.1007/978-3-030-76657-3_38.
3. Nicolas Boutry and Thierry Géraud. A new matching algorithm between trees of shapes and its application to brain tumor segmentation. In *Proceedings of the IAPR International Conference on Discrete Geometry and Mathematical Morphology (DGMM)*, volume 12708 of *Lecture Notes in Computer Science*, pages 67–78, Uppsala, Sweden, May 2021. Springer. doi:10.1007/978-3-030-76657-3_4.
4. Nicolas Boutry and Guillaume Tochon. Stability of the tree of shapes to additive noise. In *Proceedings of the IAPR International Conference on Discrete Geometry and Mathematical Morphology (DGMM)*, volume 12708 of *Lecture Notes in Computer Science*, pages 365–377, Uppsala, Sweden, May 2021. Springer. doi:10.1007/978-3-030-76657-3_26.
5. Joseph Chazalon and Edwin Carlinet. Revisiting the Coco panoptic metric to enable visual and qualitative analysis of historical map instance segmentation. In *Proceedings of the 16th International Conference on Document Analysis and Recognition (ICDAR'21)*, volume 12824 of *Lecture Notes in Computer Science*, pages 367–382, Lausanne, Switzerland, September 2021. Springer, Cham. doi:10.1007/978-3-030-86337-1_25.
6. Joseph Chazalon, Edwin Carlinet, Yizi Chen, Julien Perret, Bertrand Duménieu, Clément Mallet, Thierry Géraud, Vincent Nguyen, Nam Nguyen, Josef Baloun, Ladislav Lenc, and Pavel Král. ICDAR 2021 competition on historical map segmentation. In *Proceedings of the 16th International Conference on Document Analysis and Recognition (ICDAR'21)*, volume 12824 of *Lecture Notes in Computer Science*, pages 693–707, Lausanne, Switzerland, September 2021. Springer, Cham. doi:10.1007/978-3-030-86337-1_46.
7. Yizi Chen, Edwin Carlinet, Joseph Chazalon, Clément Mallet, Bertrand Duménieu, and Julien Perret. Combining deep learning and mathematical morphology for historical map segmentation. In *Proceedings of the IAPR International Conference on Discrete Geometry and Mathematical Morphology (DGMM)*, volume 12708 of *Lecture Notes in Computer Science*, pages 79–92, Uppsala, Sweden, May 2021. Springer. Accepted. doi:10.1007/978-3-030-76657-3_5.
8. Yizi Chen, Edwin Carlinet, Joseph Chazalon, Clément Mallet, Bertrand Duménieu, and Julien Perret. Vectorization of historical maps using deep edge filtering and closed shape extraction. In *Proceedings of the 16th International Conference on Document Analysis and Recognition (ICDAR'21)*, volume 12824 of *Lecture Notes in Computer Science*, pages 510–525, Lausanne, Switzerland, September 2021. Springer, Cham. doi:10.1007/978-3-030-86337-1_34.
9. Darine Al-Mohtar, Amani Ramzi Daou, Nour El Madhoun, and Rachad Maallawi. A secure blockchain-based architecture for the COVID-19 data network. In *2021 5th Cyber Security in Networking Conference (CSNet)*, pages 1–5, October 2021. URL: <https://ieeexplore.ieee.org/document/9614272>, doi:10.1109/CSNet52717.2021.9614272.
10. Marc Espie. Debug packages in OpenBSD. In *EuroBSDCon 2021*, 2021. URL: <https://www.openbsd.org/papers/eurobsdcon2021-espie-debug.pdf>.

11. Joaquim Estopinan, Guillaume Tochon, and Lucas Drumetz. Learning Sentinel-2 spectral dynamics for long-run predictions using residual neural networks. In *Proceedings of the 29th European Signal Processing Conference (EUSIPCO)*, Dublin, Ireland, August 2021. doi:10.23919/EUSIPCO54536.2021.9616304.
12. Frederic Grelot, Sébastien Larinier, and Marie Salmon. Automation of binary analysis: From open source collection to threat intelligence. In *Proceedings of the 28th C&ESAR*, page 41, 2021.
13. Antoine Hacquard and Didier Verna. A corpus processing and analysis pipeline for Quickref. In *Proceedings of the 14th European Lisp Symposium (ELS)*, pages 27–35, Online, May 2021. doi:10.5281/zenodo.4714443.
14. Anissa Kheireddine, Étienne Renault, and Souheib Baarrir. Towards better heuristics for solving bounded model checking problems. In Laurent D. Michel, editor, *Proceedings of the 27th International Conference on Principles and Practice of Constraint Programmings (CP)*, volume 210 of *Leibniz International Proceedings in Informatics (LIPIcs)*, pages 7:1–7:11, Montpellier, France (Virtual Conference), October 2021. Schloss Dagstuhl – Leibniz-Zentrum für Informatik. doi:10.4230/LIPIcs.CP.2021.7.
15. Alexandre Kirszenberg, Guillaume Tochon, Élodie Puybareau, and Jesus Angulo. Going beyond p-convolutions to learn grayscale morphological operators. In *Proceedings of the IAPR International Conference on Discrete Geometry and Mathematical Morphology (DGMM)*, volume 12708 of *Lecture Notes in Computer Science*, pages 470–482, Uppsala, Sweden, May 2021. Springer. doi:10.1007/978-3-030-76657-3_34.
16. Alexandre Kirszenberg, Antoine Martin, Hugo Moreau, and Etienne Renault. Go2Pins: A framework for the LTL verification of Go programs. In *Proceedings of the 27th International SPIN Symposium on Model Checking of Software (SPIN’21)*, volume 12864 of *Lecture Notes in Computer Science*, pages 140–156, Aarhus, Denmark (online), May 2021. Springer, Cham. doi:10.1007/978-3-030-84629-9_8.
17. Daniel Maldonado-Ruiz, Jenny Torres, Nour El Madhoun, and Mohamad Badra. An innovative and decentralized identity framework based on blockchain technology. In *2021 11th IFIP International Conference on New Technologies, Mobility and Security (NTMS)*, pages 1–8, April 2021. URL: <https://ieeexplore.ieee.org/document/9432656>, doi:10.1109/NTMS49979.2021.9432656.
18. Minh Ôn Vũ Ngọc, Yizi Chen, Nicolas Boutry, Joseph Chazalon, Edwin Carlinet, Jonathan Fabrizio, Clément Mallet, and Thierry Géraud. Introducing the boundary-aware loss for deep image segmentation. In *Proceedings of the 32nd British Machine Vision Conference (BMVC)*, Online, 2021. <https://www.bmvc2021-virtualconference.com/assets/papers/1546.pdf>.
19. Jim Newton and Adrien Pommellet. A portable, simple, embeddable type system. In *Proceedings of the 14th European Lisp Symposium (ELS)*, pages 11–20, Online, May 2021. European Lisp Symposium. doi:10.5281/zenodo.4709777.
20. A. Raymond, B. Brument, and P. Parrend. VizNN: Visual data augmentation with convolutional neural networks for cybersecurity investigation. In *Upper-Rhine Artificial Intelligence Symposium*, October 2021. URL: <http://icube-publis.unistra.fr/4-RBP21>.
21. A. Abou Rida, P. Parrend, and R. Amhaz. Evaluation of anomaly detection for cybersecurity using inductive node embedding with convolutional graph neural networks. In *Complex Network 2021*, October 2021. URL: <http://icube-publis.unistra.fr/4-APA21>, doi:https://doi.org/10.1007/978-3-030-93413-2_47.
22. Zhou Zhao, Nicolas Boutry, Élodie Puybareau, and Thierry Géraud. FOANet: A focus of attention network with application to myocardium segmentation. In *Proceedings of the 25th International Conference on Pattern Recognition (ICPR)*, pages 1120–1127, Milan, Italy, January 2021. IEEE. doi:10.1109/ICPR48806.2021.9412016.
23. Zhou Zhao, Nicolas Boutry, Élodie Puybareau, and Thierry Géraud. Do not treat boundaries and regions differently: An example on heart left atrial segmentation. In *Proceedings*

of the 25th International Conference on Pattern Recognition (ICPR), pages 7447–7453, Milan, Italy, January 2021. IEEE. doi:10.1109/ICPR48806.2021.9412755.

1.5 Année 2020

1.5.1 Revues

1. Nicolas Boutry, Laurent Najman, and Thierry Géraud. Topological properties of the first non-local digitally well-composed interpolation on n -D cubical grids. *Journal of Mathematical Imaging and Vision*, 62:1256–1284, September 2020. doi:10.1007/s10851-020-00989-y.
2. Nicolas Boutry, Laurent Najman, and Thierry Géraud. Equivalence between digital well-composedness and well-composedness in the sense of Alexandrov on n -D cubical grids. *Journal of Mathematical Imaging and Vision*, 62:1285–1333, September 2020. doi:10.1007/s10851-020-00988-z.
3. Minh Ôn Vũ Ngọc, Nicolas Boutry, Jonathan Fabrizio, and Thierry Géraud. A new minimum barrier distance for multivariate images with applications to salient object detection, shortest path finding, and segmentation. *Computer Vision and Image Understanding*, 197–198, August 2020. doi:10.1016/j.cviu.2020.102993.
4. Adrien Pommellet and Tayssir Touili. LTL model checking for communicating concurrent programs. *Innovations in Systems and Software Engineering: a NASA journal (ISSE)*, 16(2):161–179, June 2020. doi:10.1007/s11334-020-00363-6.
5. Etienne Renault. Improving swarming using genetic algorithms. *Innovations in Systems and Software Engineering: a NASA journal (ISSE)*, 16(2):143–159, June 2020. doi:10.1007/s11334-020-00362-7.

1.5.2 Conférences Internationales

1. Michael Atlan, Julie Rivet, Antoine Taliercio, Nicolas Boutry, Guillaume Tochon, and Jean-Pierre Huignard. Experimental digital gabor hologram rendering of *C. elegans* worms by a model-trained convolutional neural network (conference presentation). In *Label-free Biomedical Imaging and Sensing (LBIS) 2020*, volume 11251. International Society for Optics and Photonics, 2020. doi:10.1117/12.2545514.
2. František Blahoudek, Alexandre Duret-Lutz, and Jan Strejček. Seminor 2 can complement generalized Büchi automata via improved semi-determinization. In *Proceedings of the 32nd International Conference on Computer-Aided Verification (CAV'20)*, volume 12225 of *Lecture Notes in Computer Science*, pages 15–27. Springer, July 2020. doi:10.1007/978-3-030-53291-8_2.
3. Nicolas Boutry, Rocio Gonzalez-Diaz, Maria-Jose Jimenez, and Eduardo Paluzo-Hildago. Euler well-composedness. In T. Lukic, R. P. Barneva, V. Brimkov, L. Comic, and N. Sladoje, editors, *Combinatorial Image Analysis: Proceedings of the 20th International Workshop, IWCIA 2020, Novi Sad, Serbia, July 16–18, 2020*, volume 12148 of *Lecture Notes in Computer Science*, pages 3–19. Springer, 2020. doi:10.1007/978-3-030-51002-2_1.
4. Nicolas Boutry, Rocio Gonzalez-Diaz, Laurent Najman, and Thierry Géraud. A 4D counterexample showing that DWCness does not imply CWCness in n -D. In T. Lukic, R. P. Barneva, V. Brimkov, L. Comic, and N. Sladoje, editors, *Combinatorial Image Analysis: Proceedings of the 20th International Workshop, IWCIA 2020, Novi Sad, Serbia, July 16–18, 2020*, volume 12148 of *Lecture Notes in Computer Science*, pages 73–87. Springer, 2020. doi:10.1007/978-3-030-51002-2_6.
5. Lucas Drumetz, Mauro Dalla Mura, Guillaume Tochon, and Ronan Fablet. Learning end-member dynamics in multitemporal hyperspectral data using a state-space model formulation. In *Proceedings of the 45th IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, pages 2483–2487, Barcelona, Spain, May 2020. doi:10.1109/ICASSP40776.2020.9053787.

6. Saeed Nejati, Ludovic Le Frioux, and Vijay Ganesh. A machine learning based splitting heuristic for divide-and-conquer solvers. In *Proceedings of the 26th International Conference on Principles and Practice of Constraint Programming (CP'20)*, volume 12333 of *Lecture Notes in Computer Science*, pages 899–916. Springer, Cham, September 2020.
7. Florian Renkin, Alexandre Duret-Lutz, and Adrien Pommellet. Practical “paritizing” of Emerson–Lei automata. In *Proceedings of the 18th International Symposium on Automated Technology for Verification and Analysis (ATVA'20)*, volume 12302 of *Lecture Notes in Computer Science*, pages 127–143. Springer, October 2020. doi:[10.1007/978-3-030-59152-6_7](https://doi.org/10.1007/978-3-030-59152-6_7).
8. Vincent Vallade, Ludovic Le Frioux, Souheib Baarir, Julien Sopena, and Fabrice Kordon. On the usefulness of clause strengthening in parallel SAT solving. In *Proceedings of the 12th NASA Formal Methods Symposium (NFM'20)*, volume 12229 of *Lecture Notes in Computer Science*, pages 222–229. Springer, Cham, August 2020.
9. Vincent Vallade, Ludovic Le Frioux, Souheib Baarir, Julien Sopena, Vijay Ganesh, and Fabrice Kordon. Community and LBD-based clause sharing policy for parallel SAT solving. In *Proceedings of the 23rd International Conference on Theory and Applications of Satisfiability Testing (SAT'20)*, volume 12178 of *Lecture Notes in Computer Science*, pages 11–27. Springer, Cham, June 2020.
10. Zhou Zhao, Nicolas Boutry, and Elodie Puybareau. Stacked and parallel U-nets with multi-output for myocardial pathology segmentation. In *Myocardial Pathology Segmentation Combining Multi-Sequence CMR Challenge*, volume 12554 of *Lecture Notes in Computer Science*, pages 138–145. Springer, 2020. doi:[10.1007/978-3-030-65651-5_13](https://doi.org/10.1007/978-3-030-65651-5_13).
11. Zhou Zhao, Nicolas Boutry, Élodie Puybareau, and Thierry Géraud. A two-stage temporal-like fully convolutional network framework for left ventricle segmentation and quantification on MR images. In Mihaela Pop, Maxime Sermesant, Oscar Camara, Xiahai Zhuang, Shuo Li, Alistair Young, Tommaso Mansi, and Avan Suinesiaputra, editors, *Statistical Atlases and Computational Models of the Heart. Multi-Sequence CMR Segmentation, CRT-EPiggy and LV Full Quantification Challenges—10th International Workshop, STACOM 2019, Held in Conjunction with MICCAI 2019, Shenzhen, China, October 13, 2019, Revised Selected Papers*, volume 12009 of *Lecture Notes in Computer Science*, pages 405–413. Springer, 2020. doi:[10.1007/978-3-030-39074-7_42](https://doi.org/10.1007/978-3-030-39074-7_42).

1.6 Année 2019

1.6.1 Revues

1. Vincent Bloemen, Alexandre Duret-Lutz, and Jaco van de Pol. Model checking with generalized Rabin and Fin-less automata. *International Journal on Software Tools for Technology Transfer*, 21(3):307–324, June 2019. doi:[10.1007/s10009-019-00508-4](https://doi.org/10.1007/s10009-019-00508-4).
2. Nicolas Boutry, Rocio Gonzalez-Diaz, and Maria-Jose Jimenez. Weakly well-composed cell complexes over n D pictures. *Information Sciences*, 499:62–83, October 2019. doi:[10.1016/j.ins.2018.06.005](https://doi.org/10.1016/j.ins.2018.06.005).
3. Nicolas Boutry, Thierry Géraud, and Laurent Najman. How to make n -D plain maps Alexandrov-well-composed in a self-dual way. *Journal of Mathematical Imaging and Vision*, 61(6):849–873, July 2019. doi:[10.1007/s10851-019-00873-4](https://doi.org/10.1007/s10851-019-00873-4).
4. Lê Duy Huỳnh, Nicolas Boutry, and Thierry Géraud. Connected filters on generalized shape-spaces. *Pattern Recognition Letters*, 128:348–354, December 2019. doi:[10.1016/j.patrec.2019.09.018](https://doi.org/10.1016/j.patrec.2019.09.018).
5. H. J. Kuijff, J. M. Biesbroek, J. de Bresser, R. Heinen, S. Andermatt, M. Bento, M. Berseth, M. Belyaev, M. J. Cardoso, A. Casamitjana, D. L. Collins, M. Dadar, A. Georgiou, M. Ghafourian, D. Jin, A. Khademi, J. Knight, H. Li, X. Lladó, M. Luna, Q. Mahmood, R. McKinley, A. Mehrtash, S. Ourselin, B. Park, H. Park, S. H. Park, S. Pezold, Élodie Puybareau,

- L. Rittner, C. H. Sudre, S. Valverde, V. Vilaplana, R. Wiest, Yongchao Xu, Z. Xu, G. Zeng, J. Zhang, G. Zheng, C. Chen, W. van der Flier, F. Barkhof, M. A. Viergever, and G. J. Biessels. Standardized assessment of automatic segmentation of white matter hyperintensities: Results of the WMH segmentation challenge. *IEEE Transactions on Medical Imaging*, 38(11):2556–2568, November 2019. URL: [10.1109/TMI.2019.2905770](https://doi.org/10.1109/TMI.2019.2905770).
6. Jim Newton and Didier Verna. A theoretical and numerical analysis of the worst-case size of reduced ordered binary decision diagrams. *ACM Transactions on Computational Logic*, 20(1):1–36, January 2019.
 7. Diane Genest, Élodie Puybareau, Marc Léonard, Jean Cousty, Noémie De Crozé, and Hugues Talbot. High throughput automated detection of axial malformations in Medaka embryo. *Computers in Biology and Medicine*, 105:157–168, February 2019. doi:[10.1016/j.combiomed.2018.12.016](https://doi.org/10.1016/j.combiomed.2018.12.016).
 8. Guillaume Tochon, Mauro Dalla Mura, Miguel Angel Veganzones, Thierry Géraud, and Jocelyn Chanussot. Braids of partitions for the hierarchical representation and segmentation of multimodal images. *Pattern Recognition*, 95:162–172, November 2019.
 9. Li Wang, Dong Nie, Guannan Li, Élodie Puybareau, Jose Dolz, Qian Zhang, Fan Wang, Jing Xia, Zhengwang Wu, Jiawei Chen, Kim-Han Thung, Toan Duc Bui, Jitae Shin, Guodong Zeng, Guoyan Zheng, Vladimir S. Fonov, Andrew Doyle, Yongchao Xu, Pim Moeskops, Josien P.W. Pluim, Christian Desrosiers, Ismail Ben Ayed, Gerard Sanroma, Oualid M. Benkarim, Adrià Casamitjana, Verónica Vilaplana, Weili Lin, Gang Li, and Dinggang Shen. Benchmark on automatic 6-month-old infant brain segmentation algorithms: The iSeg-2017 challenge. *IEEE Transactions on Medical Imaging*, 38(9):2219–2230, September 2019. doi:[10.1109/TMI.2019.2901712](https://doi.org/10.1109/TMI.2019.2901712).

1.6.2 Conférences Internationales

1. Christel Baier, František Blahoudek, Alexandre Duret-Lutz, Joachim Klein, David Müller, and Jan Strejček. Generic emptiness check for fun and profit. In *Proceedings of the 17th International Symposium on Automated Technology for Verification and Analysis (ATVA '19)*, volume 11781 of *Lecture Notes in Computer Science*, pages 445–461. Springer, October 2019. doi:[10.1007/978-3-030-31784-3_26](https://doi.org/10.1007/978-3-030-31784-3_26).
2. Nicolas Boutry, Rocio Gonzalez-Diaz, and Maria-Jose Jimenez. One more step towards well-composedness of cell complexes over n -D pictures. In Michel Couprie, Jean Cousty, Yukiko Kenmochi, and Nabil Mustafa, editors, *Proceedings of the 21st International Conference on Discrete Geometry for Computer Imagery (DGCI)*, volume 11414 of *Lecture Notes in Computer Science*, pages 101–114, Marne-la-Vallée, France, March 2019. Springer. doi:doi.org/10.1007/978-3-030-14085-4_9.
3. Nicolas Boutry, Thierry Géraud, and Laurent Najman. An equivalence relation between morphological dynamics and persistent homology in 1D. In *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 14th International Symposium on Mathematical Morphology (ISMM)*, volume 12708 of *Lecture Notes in Computer Science Series*, pages 1–12, Saarbrücken, Germany, July 2019. Springer. doi:[10.1007/978-3-030-20867-7_5](https://doi.org/10.1007/978-3-030-20867-7_5).
4. Nicolas Boutry, Joseph Chazalon, Élodie Puybareau, Guillaume Tochon, Hugues Talbot, and Thierry Géraud. Using separated inputs for multimodal brain tumor segmentation with 3D U-Net-like architectures. In A. Crimi and S. Bakas, editors, *Proceedings of the 4th International Workshop, BrainLes 2019, Held in Conjunction with MICCAI 2019*, volume 11992 of *Lecture Notes in Computer Science*, pages 187–199. Springer, 2019. doi:[10.1007/978-3-030-46640-4_18](https://doi.org/10.1007/978-3-030-46640-4_18).
5. Thibault Buatois, Élodie Puybareau, Guillaume Tochon, and Joseph Chazalon. Two stages CNN-based segmentation of gliomas, uncertainty quantification and prediction of overall patient survival. In A. Crimi and S. Bakas, editors, *International MICCAI Brainlesion*

- Workshop*, volume 11992 of *Lecture Notes in Computer Science*, pages 167–178. Springer, 2019. doi:10.1007/978-3-030-46643-5_16.
6. Edwin Carlinet and Thierry Géraud. Intervertebral disc segmentation using mathematical morphology—A CNN-free approach. In *Proceedings of the 5th MICCAI Workshop & Challenge on Computational Methods and Clinical Applications for Spine Imaging (CSI)*, volume 11384 of *Lecture Notes in Computer Science*, pages 105–118. Springer, 2019. doi:10.1007/978-3-030-13736-6_9.
 7. Edwin Carlinet and Thierry Géraud. Introducing multivariate connected openings and closings. In *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 14th International Symposium on Mathematical Morphology (ISMM)*, Lecture Notes in Computer Science Series, pages 1–12, Saarbrücken, Germany, July 2019. Springer. doi:10.1007/978-3-030-20867-7_17.
 8. Baptiste Esteban, Guillaume Tochon, and Thierry Géraud. Estimating the noise level function with the tree of shapes and non-parametric statistics. In *Proceedings of the 18th International Conference on Computer Analysis of Images and Patterns (CAIP)*, volume 11679 of *Lecture Notes in Computer Science Series*, pages 377–388, Salerno, Italy, September 2019. Springer. doi:10.1007/978-3-030-29891-3_33.
 9. Ludovic Le Frioux, Souheib Baair, Julien Sopena, and Fabrice Kordon. Modular and efficient divide-and-conquer SAT solver on top of the Painless framework. In *Proceedings of the 25th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS’19)*, volume 11427 of *Lecture Notes in Computer Science*, pages 135–151. Springer, Cham, April 2019.
 10. Minh Ôn Vũ Ngọc, Jonathan Fabrizio, and Thierry Géraud. Document detection in videos captured by smartphones using a saliency-based method. In *International Conference on Document Analysis and Recognition Workshops (ICDARW)*, volume 4, pages 19–24, Sydney, Australia, September 2019. IEEE. doi:10.1109/ICDARW.2019.30059.
 11. Jim Newton and Didier Verna. Finite automata theory based optimization of conditional variable binding. In *European Lisp Symposium*, Genova, Italy, April 2019.
 12. Denis Poitrenaud and Etienne Renault. Combining parallel emptiness checks with partial order reductions. In Yamine Ait Ameur and Shengchao Qin, editors, *Proceedings of the 21st International Conference on Formal Engineering Methods (ICFEM’19)*, volume 11852 of *Lecture Notes in Computer Science*, pages ??–??, Shenzhen, China, November 2019. Springer.
 13. Élodie Puybureau, Zhou Zhao, Younes Khoukli, Edwin Carlinet, Yongchao Xu, Jérôme Lacotte, and Thierry Géraud. Left atrial segmentation in a few seconds using fully convolutional network and transfer learning. In *Proceedings of the Workshop on Statistical Atlases and Computational Modelling of the Heart (STACOM 2018), in conjunction with MICCAI*, volume 11395 of *Lecture Notes in Computer Science*, pages 339–347. Springer, 2019. doi:10.1007/978-3-030-12029-0_37.
 14. Élodie Puybureau, Edwin Carlinet, Alessandro Benfenati, and Hugues Talbot. Spherical fluorescent particle segmentation and tracking in 3D confocal microscopy. In *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 14th International Symposium on Mathematical Morphology (ISMM)*, Lecture Notes in Computer Science Series, pages 1–12, Saarbrücken, Germany, July 2019. Springer. doi:10.1007/978-3-030-20867-7_40.
 15. Julie Rivet, Guillaume Tochon, Serge Meimon, Michel Paques, Michael Atlan, and Thierry Géraud. Motion compensation in digital holography for retinal imaging. In *Proceedings of the IEEE International Symposium on Biomedical Imaging (ISBI)*, pages 1428–1431, Venice, Italy, April 2019. doi:10.1109/ISBI.2019.8759564.
 16. Julie Rivet, Guillaume Tochon, Serge Meimon, Michel Pâques, Thierry Géraud, and Michael Atlan. Deep neural networks for aberrations compensation in digital holographic imaging

of the retina. In *Proceedings of the SPIE Conference on Adaptive Optics and Wavefront Control for Biological Systems V*, San Francisco, CA, USA, February 2019. doi:[10.1117/12.2509711](https://doi.org/10.1117/12.2509711).

17. Michaël Roynard, Edwin Carlinet, and Thierry Géraud. An image processing library in modern C++: Getting simplicity and efficiency with generic programming. In *Proceedings of the 2nd Workshop on Reproducible Research in Pattern Recognition (RRPR 2018)*, volume 11455 of *Lecture Notes in Computer Science*, pages 121–137, 2019. doi:[10.1007/978-3-030-23987-9_12](https://doi.org/10.1007/978-3-030-23987-9_12).
18. Guillaume Tochon, Mauro Dalla Mura, and Jocelyn Chanussot. Constructing a braid of partitions from hierarchies of partitions. In *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 14th International Symposium on Mathematical Morphology (ISMM)*, Lecture Notes in Computer Science Series, pages 1–12, Saarbrücken, Germany, July 2019. Springer. doi:[10.1007/978-3-030-20867-7_9](https://doi.org/10.1007/978-3-030-20867-7_9).
19. Léo Valais, Jim Newton, and Didier Verna. Implementing baker’s SUBTYPEP decision procedure. In *12th European Lisp Symposium*, Genova, Italy, April 2019.
20. Didier Verna. Parallelizing quickref. In *12th European Lisp Symposium*, pages 89–96, Genova, Italy, April 2019. doi:[10.5281/zenodo.2632534](https://doi.org/10.5281/zenodo.2632534).
21. Didier Verna. Quickref: Common Lisp reference documentation as a stress test for Texinfo. In Barbara Beeton and Karl Berry, editors, *TUGboat*, volume 40, pages 119–125. T_EX Users Group, T_EX Users Group, September 2019.

1.6.3 Conférences Nationales

1. Edwin Carlinet and Thierry Géraud. Filtres connexes multivariés par fusion d’arbres de composantes. In *Proceedings of the 27th Symposium on Signal and Image Processing (GRETSI)*, Lille, France, August 2019.
2. Baptiste Esteban, Guillaume Tochon, and Thierry Géraud. Estimation du niveau de bruit par arbre des formes et statistiques non paramétriques. In *Proceedings of the 27th Symposium on Signal and Image Processing (GRETSI)*, Lille, France, August 2019.

1.7 Année 2018

1.7.1 Chapitres de livres

1. Jiri Barnat, Vincent Bloemen, Alexandre Duret-Lutz, Alfons Laarman, Laure Petrucci, Jaco van de Pol, and Etienne Renault. Parallel model checking algorithms for linear-time temporal logic. In Youssef Hamadi and Lakhdar Sais, editors, *Handbook of Parallel Constraint Reasoning*, chapter 12, pages 457–507. Springer International Publishing, Cham, 2018. doi:[10.1007/978-3-319-63516-3_12](https://doi.org/10.1007/978-3-319-63516-3_12).

1.7.2 Revues

1. Nicolas Boutry, Thierry Géraud, and Laurent Najman. A tutorial on well-composedness. *Journal of Mathematical Imaging and Vision*, 60(3):443–478, March 2018. doi:[10.1007/s10851-017-0769-6](https://doi.org/10.1007/s10851-017-0769-6).
2. Markus Götz, Gabriele Cavallaro, Thierry Géraud, Matthias Book, and Morris Riedel. Parallel computation of component trees on distributed memory machines. *IEEE Transactions on Parallel and Distributed Systems*, 29(11):2582–2598, May 2018. doi:[10.1109/TPDS.2018.2829724](https://doi.org/10.1109/TPDS.2018.2829724).
3. Marçal Rusiñol, Joseph Chazalon, and Katerine Diaz-Chito. Augmented songbook: an augmented reality educational application for raising music awareness. *Multimedia Tools and Applications*, 77(11):13773–13798, June 2018. doi:[10.1007/s11042-017-4991-4](https://doi.org/10.1007/s11042-017-4991-4).

4. Didier Verna. Lisp, jazz, aikido. *The Art, Science and Engineering of Programming Journal*, 2(3), March 2018. doi:[10.22152/programming-journal.org/2018/2/10](https://doi.org/10.22152/programming-journal.org/2018/2/10).
5. Yongchao Xu, Baptiste Morel, Sonia Dahdouh, Élodie Puybureau, Alessio Virzì, H el ene Urien, Thierry G eraud, Catherine Adamsbaum, and Isabelle Bloch. The challenge of cerebral magnetic resonance imaging in neonates: A new method using mathematical morphology for the segmentation of structures including diffuse excessive high signal intensities. *Medical Image Analysis*, 48:75–94, August 2018. doi:[10.1016/j.media.2018.05.003](https://doi.org/10.1016/j.media.2018.05.003).

1.7.3 Conf erences Internationales

1. Sylvie Boldo, Florian Faissole, and Vincent Tourneur. A formally-proved algorithm to compute the correct average of decimal floating-point numbers. In *25th IEEE Symposium on Computer Arithmetic*, Amherst, MA, United States, June 2018.
2. Edwin Carlinet, Thierry G eraud, and S ebastien Crozet. The tree of shapes turned into a max-tree: A simple and efficient linear algorithm. In *Proceedings of the 24th IEEE International Conference on Image Processing (ICIP)*, pages 1488–1492, Athens, Greece, October 2018. doi:[10.1109/ICIP.2018.8451180](https://doi.org/10.1109/ICIP.2018.8451180).
3. Aliona Dangla,  Elodie Puybureau, Guillaume Tochon, and Jonathan Fabrizio. A first step toward a fair comparison of evaluation protocols for text detection algorithms. In *Proceedings of the IAPR International Workshop on Document Analysis Systems (DAS)*, Vienna, Austria, April 2018. doi:[10.1109/DAS.2018.55](https://doi.org/10.1109/DAS.2018.55).
4. Hakan Metin, Souheib Baarir, Maximilien Colange, and Fabrice Kordon. CDCLSym: Introducing effective symmetry breaking in SAT solving. In *Proceedings of the 24th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS’18)*, volume 10805 of *Lecture Notes in Computer Science*, pages 99–114, Thessaloniki, Greece, April 2018. Springer.
5. Thibaud Michaud and Maximilien Colange. Reactive synthesis from LTL specification with Spot. In *Proceedings of the 7th Workshop on Synthesis, SYNT@CAV 2018*, volume xx of *Electronic Proceedings in Theoretical Computer Science*, page xx, 2018.
6. Minh  on V u Ng oc, Jonathan Fabrizio, and Thierry G eraud. Saliency-based detection of identity documents captured by smartphones. In *Proceedings of the IAPR International Workshop on Document Analysis Systems (DAS)*, pages 387–392, Vienna, Austria, April 2018. doi:[10.1109/DAS.2018.17](https://doi.org/10.1109/DAS.2018.17).
7. Jim Newton and Didier Verna. Approaches in typecase optimization. In *European Lisp Symposium*, Marbella, Spain, April 2018.
8. Jim Newton and Didier Verna. Recognizing heterogeneous sequences by rational type expression. In *Proceedings of the Meta’18: Workshop on Meta-Programming Techniques and Reflection*, Boston, MA USA, November 2018.
9.  Elodie Puybureau, Guillaume Tochon, Joseph Chazalon, and Jonathan Fabrizio. Segmentation of gliomas and prediction of patient overall survival: A simple and fast procedure. In *Proceedings of the Workshop on Brain Lesions (BrainLes), in conjunction with MICCAI*, volume 11384 of *Lecture Notes in Computer Science*, pages 199–209. Springer, 2018. doi:[10.1007/978-3-030-11726-9_18](https://doi.org/10.1007/978-3-030-11726-9_18).
10.  Elodie Puybureau and Thierry G eraud. Real-time document detection in smartphone videos. In *Proceedings of the 24th IEEE International Conference on Image Processing (ICIP)*, pages 1498–1502, Athens, Greece, October 2018. doi:[10.1109/ICIP.2018.8451533](https://doi.org/10.1109/ICIP.2018.8451533).
11. Etienne Renault. Improving parallel state-space exploration using genetic algorithms. In Mohamed Faouzi Atig, Saddek Bensalem, Simon Bliudze, and Bruno Monsuez, editors, *Proceedings of the 12th International Conference on Verification and Evaluation of Computer and Communication Systems (VECOS’18)*, volume 11181 of *Lecture Notes in Computer Science*, pages 133–149, Grenoble, France, September 2018. Springer, Cham.

12. Didier Verna. Method combinators. In *11th European Lisp Symposium*, Marbella, Spain, April 2018. doi:[10.5281/zenodo.3247610](https://doi.org/10.5281/zenodo.3247610).
13. Yongchao Xu, Thierry Géraud, Élodie Puybareau, Isabelle Bloch, and Joseph Chazalon. White matter hyperintensities segmentation in a few seconds using fully convolutional network and transfer learning. In A. Crimi, S. Bakas, H. Kuijf, B. Menze, and M. Reyes, editors, *Brainlesion: Glioma, Multiple Sclerosis, Stroke and Traumatic Brain Injuries— 3rd International Workshop, BrainLes 2017, Held in Conjunction with MICCAI 2017, Quebec City, QC, Canada, September 14 2017, Revised Selected Papers*, volume 10670 of *Lecture Notes in Computer Science*, pages 501–514. Springer, Cham, 2018. doi:[10.1007/978-3-319-75238-9_42](https://doi.org/10.1007/978-3-319-75238-9_42).

1.7.4 Conférences Nationales

1. Edwin Carlinet, Sébastien Crozet, and Thierry Géraud. Un algorithme de complexité linéaire pour le calcul de l’arbre des formes. In *Actes du congrès Reconnaissance des Formes, Image, Apprentissage et Perception (RFIAP)*, Marne-la-Vallée, France, June 2018.
2. Élodie Puybareau, Yongchao Xu, Joseph Chazalon, Isabelle Bloch, and Thierry Géraud. Segmentation des hyperintensités de la matière blanche en quelques secondes à l’aide d’un réseau de neurones convolutif et de transfert d’apprentissage. In *Actes du congrès Reconnaissance des Formes, Image, Apprentissage et Perception (RFIAP), session spéciale “Deep Learning, deep in France”*, Marne-la-Vallée, France, June 2018.

1.8 Année 2017

1.8.1 Chapitres de livres

1. Guillaume Tochon, Mauro Dalla Mura, Miguel-Angel Veganzones, Silvia Valero, Philippe Salembier, and Jocelyn Chanussot. Advances in utilization of hierarchical representations in remote sensing data analysis. In Shunling Liang, editor, *Comprehensive Remote Sensing, 1st Edition*, volume 2, chapter 5, pages 77–107. Elsevier, November 2017.

1.8.2 Revues

1. Akim Demaille. Derived-term automata of multitape expressions with composition. *Scientific Annals of Computer Science*, 27(2):137–176, 2017. doi:[10.7561/SACS.2017.2.137](https://doi.org/10.7561/SACS.2017.2.137).
2. Etienne Renault, Alexandre Duret-Lutz, Fabrice Kordon, and Denis Poitrenaud. Variations on parallel explicit model checking for generalized Büchi automata. *International Journal on Software Tools for Technology Transfer (STTT)*, 19(6):653–673, April 2017. First published online on 26 April 2016. doi:[10.1007/s10009-016-0422-5](https://doi.org/10.1007/s10009-016-0422-5).
3. Guillaume Tochon, Jocelyn Chanussot, Mauro Dalla Mura, and Andrea Bertozzi. Object tracking by hierarchical decomposition of hyperspectral video sequences: Application to chemical gas plume tracking. *IEEE Transactions on Geoscience and Remote Sensing*, 55(8):4567–4585, August 2017. doi:[10.1109/TGRS.2017.2694159](https://doi.org/10.1109/TGRS.2017.2694159).
4. Yongchao Xu, Edwin Carlinet, Thierry Géraud, and Laurent Najman. Hierarchical segmentation using tree-based shape spaces. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 39(3):457–469, April 2017. doi:[10.1109/TPAMI.2016.2554550](https://doi.org/10.1109/TPAMI.2016.2554550).

1.8.3 Conférences Internationales

1. František Blahoudek, Alexandre Duret-Lutz, Mikuláš Klokočka, Mojmír Křetínský, and Jan Strejček. Seminotor: A tool for semi-determinization of omega-automata. In Thomas Eiter, David Sands, and Geoff Sutcliffe, editors, *Proceedings of the 21th International Conference on Logic for Programming, Artificial Intelligence, and Reasoning (LPAR-21)*, volume 46

- of *EPiC Series in Computing*, pages 356–367. EasyChair Publications, May 2017. doi:
10.29007/k5n1.
2. Vincent Bloemen, Alexandre Duret-Lutz, and Jaco van de Pol. Explicit state model checking with generalized büchi and rabin automata. In *Proceedings of the 24th International SPIN Symposium on Model Checking of Software (SPIN'17)*, pages 50–59. ACM, July 2017. doi:10.1145/3092282.3092288.
 3. Nicolas Boutry, Laurent Najman, and Thierry Géraud. Well-composedness in Alexandrov spaces implies digital well-composedness in z^n . In W.G. Kropatsch, N.M. Artner, and I. Janusch, editors, *Discrete Geometry for Computer Imagery – Proceedings of the 20th IAPR International Conference on Discrete Geometry for Computer Imagery (DGCI)*, volume 10502 of *Lecture Notes in Computer Science*, pages 225–237, Vienna, Austria, September 2017. Springer. doi:10.1007/978-3-319-66272-5_19.
 4. J. Chazalon, P. Gomez-Krämer, J.-C. Burie, M. Coustaty, S. Eskenazi, M. Luqman, N. Nayef, M. Rusiñol, N. Sidère, and J.M. Ogier. SmartDoc 2017 video capture: Mobile document acquisition in video mode. In *Proceedings of the 1st International Workshop on Open Services and Tools for Document Analysis (ICDAR-OST)*, pages 11–16, Kyoto, Japan, November 2017. doi:10.1109/ICDAR.2017.306.
 5. Akim Demaille and Thibaud Michaud. Derived-term automata of weighted rational expressions with quotient operators. In *Proceedings of the Thirteenth International Colloquium on Theoretical Aspects of Computing (ICTAC)*, volume 10580 of *Lecture Notes in Computer Science*, pages 155–173, Hanoi, Vietnam, October 2017. Springer.
 6. Jordan Drapeau, Thierry Géraud, Mickaël Coustaty, Joseph Chazalon, Jean-Christophe Burie, Véronique Eglin, and Stéphane Bres. Extraction of ancient map contents using trees of connected components. In *Proceedings of the 12th IAPR International Workshop on Graphics Recognition (GREC)*, Kyoto, Japan, November 2017. doi:10.1007/978-3-030-02284-6_9.
 7. Lucas Drumetz, Guillaume Tochon, Jocelyn Chanussot, and Christian Jutten. Estimating the number of endmembers to use in spectral unmixing of hyperspectral data with collaborative sparsity. In *Proceedings of the 13th International Conference on Latent Variable Analysis and Signal Separation (LVA-ICA)*, Grenoble, France, February 2017.
 8. Thierry Géraud, Yongchao Xu, Edwin Carlinet, and Nicolas Boutry. Introducing the Dahu pseudo-distance. In J. Angulo, S. Velasco-Forero, and F. Meyer, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 13th International Symposium on Mathematical Morphology (ISMM)*, volume 10225 of *Lecture Notes in Computer Science*, pages 55–67, Fontainebleau, France, May 2017. Springer. doi:10.1007/978-3-319-57240-6_5.
 9. Lê Duy Huỳnh, Yongchao Xu, and Thierry Géraud. Morphological hierarchical image decomposition based on Laplacian 0-crossings. In J. Angulo, S. Velasco-Forero, and F. Meyer, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 13th International Symposium on Mathematical Morphology (ISMM)*, volume 10225 of *Lecture Notes in Computer Science*, pages 159–171, Fontainebleau, France, May 2017. Springer. doi:10.1007/978-3-319-57240-6_13.
 10. Swen Jacobs, Nicolas Basset, Roderick Bloem, Romain Breguier, Maximilien Colange, Peter Faymonville, Bernd Finkbeiner, Ayrat Khalimov, Felix Klein, Thibaud Michaud, Guillermo A. Pérez, Jean-François Raskin, Ocan Sankur, and Leander Tentrup. The 4th reactive synthesis competition (syntcomp 2017): Benchmarks, participants & results. In Dana Fisman and Swen Jacobs, editors, *Proceedings Sixth Workshop on Synthesis*, volume 260 of *Electronic Proceedings in Theoretical Computer Science*, pages 116–143, Heidelberg, Germany, July 2017. Open Publishing Association. doi:10.4204/EPTCS.260.10.
 11. Ludovic Le Frioux, Souheib Baarir, Julien Sopena, and Fabrice Kordon. PaInleSS: a framework for parallel SAT solving. In *Proceedings of the 20th International Conference on*

Theory and Applications of Satisfiability Testing (SAT'17), volume 10491 of *Lecture Notes in Computer Science*, pages 233–250. Springer, Cham, August 2017.

12. Tarek Menouer and Souheib Baairir. Parallel learning portfolio-based solvers. In *Proceedings of the International Conference on Computational Science (ICCS)*, pages 335–344, Zurich, Switzerland, June 2017.
13. Tarek Menouer and Souheib Baairir. Parallel satisfiability solver based on hybrid partitioning method. In *Proceedings of the 25th Euromicro International Conference on Parallel, Distributed and Network-based Processing (PDP)*, pages 54–60, St. Petersburg, Russia, March 2017.
14. Jim Newton, Didier Verna, and Maximilien Colange. Programmatic manipulation of Common Lisp type specifiers. In *European Lisp Symposium*, Brussels, Belgium, April 2017.
15. Élodie Puybureau, Hugues Talbot, and Laurent Najman. Periodic area-of-motion characterization for bio-medical applications. In *Proceedings of the IEEE International Symposium on Bio-Medical Imaging (ISBI)*, Melbourne, Australia, April 2017. doi:10.1109/ISBI.2017.7950503.
16. Élodie Puybureau, Hugues Talbot, Noha Gaber, and Tarik Bourouina. Morphological analysis of brownian motion for physical measurements. In J. Angulo, S. Velasco-Forero, and F. Meyer, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 13th International Symposium on Mathematical Morphology (ISMM)*, volume 10225 of *Lecture Notes in Computer Science*, pages 486–497, Fontainebleau, France, May 2017. Springer. doi:10.1007/978-3-319-57240-6_40.
17. E. Royer, J. Chazalon, M. Rusiñol, and F. Bouchara. Benchmarking keypoint filtering approaches for document image matching. In *Proceedings of the 14th International Conference on Document Analysis and Recognition (ICDAR)*, pages 343–348, Kyoto, Japan, November 2017. doi:10.1109/ICDAR.2017.64.
18. Yongchao Xu, Thierry Géraud, and Isabelle Bloch. From neonatal to adult brain MR image segmentation in a few seconds using 3D-like fully convolutional network and transfer learning. In *Proceedings of the 23rd IEEE International Conference on Image Processing (ICIP)*, pages 4417–4421, Beijing, China, September 2017. doi:10.1109/ICIP.2017.8297117.

1.8.4 Conférences Nationales

1. Edwin Carlinet, Yongchao Xu, Nicolas Boutry, and Thierry Géraud. La pseudo-distance du dahu. In *Actes d'ORASIS*, Colleville-sur-Mer, France, June 2017.
2. Élodie Puybureau, Hugues Talbot, and Laurent Najman. Caractérisation des zones de mouvement périodiques pour applications bio-médicales. In *Actes du 26e Colloque GRETSI*, Juan-les-Pins, France, September 2017.
3. Yongchao Xu, Thierry Géraud, and Isabelle Bloch. Segmentation d'IRM de cerveaux de nouveau-nés en quelques secondes à l'aide d'un réseau de neurones convolutif *pseudo-3d* et de transfert d'apprentissage. In *Actes du 26e Colloque GRETSI*, Juan-les-Pins, France, September 2017.

1.8.5 Rapports de Recherche

1. Jim Newton. Analysis of algorithms calculating the maximal disjoint decomposition of a set. Technical report, LRDE, Paris, France, January 2017.

1.9 Année 2016

1.9.1 Revues

1. Stefania Calarasanu, Jonathan Fabrizio, and Séverine Dubuisson. What is a good evaluation protocol for text localization systems? concerns, arguments, comparisons and solutions.

Image and Vision Computing, 46:1–17, February 2016. doi:[10.1016/j.imavis.2015.12.001](https://doi.org/10.1016/j.imavis.2015.12.001).

2. Jonathan Fabrizio, Myriam Robert-Seidowsky, Séverine Dubuisson, Stefania Calarasanu, and Raphaël Boissel. Textcatcher: A method to detect curved and challenging text in natural scenes. *International Journal on Document Analysis and Recognition*, 19(2):99–117, February 2016. doi:[10.1007/s10032-016-0264-4](https://doi.org/10.1007/s10032-016-0264-4).
3. Yongchao Xu, Thierry Géraud, and Laurent Najman. Connected filtering on tree-based shape-spaces. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 38(6):1126–1140, June 2016. doi:[10.1109/TPAMI.2015.2441070](https://doi.org/10.1109/TPAMI.2015.2441070).
4. Yongchao Xu, Thierry Géraud, and Laurent Najman. Hierarchical image simplification and segmentation based on Mumford-Shah-salient level line selection. *Pattern Recognition Letters*, 83(3):278–286, November 2016. doi:[10.1016/j.patrec.2016.05.006](https://doi.org/10.1016/j.patrec.2016.05.006).

1.9.2 Conférences Internationales

1. Stefania Calarasanu, Jonathan Fabrizio, and Séverine Dubuisson. From text detection to text segmentation: a unified evaluation scheme. In *Proceedings of the 2nd International Workshop on Robust Reading Conference (IWRR-ECCV)*, Amsterdam, The Netherlands, October 2016.
2. Stefania Calarasanu, Séverine Dubuisson, and Jonathan Fabrizio. Towards the rectification of highly distorted texts. In *Proceedings of the 11th International Conference on Computer Vision Theory and Applications (VISAPP)*, Rome, Italie, February 2016. doi:[10.5220/0005772602410248](https://doi.org/10.5220/0005772602410248).
3. Gabriele Cavallaro, Mauro Dalla Mura, Edwin Carlinet, Thierry Géraud, Nicola Falco, and Jón Atli Benediktsson. Region-based classification of remote sensing images with the morphological tree of shapes. In *Proceedings of the IEEE International Geoscience and Remote Sensing Symposium (IGARSS)*, pages 5087–5090, Beijing, China, July 2016. doi:[10.1109/IGARSS.2016.7730326](https://doi.org/10.1109/IGARSS.2016.7730326).
4. Pedro A. Torres-Carrasquillo, Frederick Richardson, Shahan Nercessian, Douglas Sturim, William Campbell, Youngjune Gwon, Swaroop Vattam, Reda Dehak, Harish Mallidi, Phani Sankar Nidadavolu, Ruizhi Li, Raghavendra Reddy Pappagari, Nanxin Chen, Najim Dehak, and Ruben Zazo. The Mit Lincoln Laboratory 2016 speaker recognition system. In *NIST Speaker Recognition Evaluation 2016*, San Diego, California, December 2016.
5. Akim Demaille. Derived-term automata of multitape rational expressions. In Yo-Sub Han and Kai Salomaa, editors, *Proceedings of Implementation and Application of Automata, 21st International Conference (CIAA'16)*, volume 9705 of *Lecture Notes in Computer Science*, pages 51–63, Seoul, South Korea, July 2016. Springer. doi:[10.1007/978-3-319-40946-7_5](https://doi.org/10.1007/978-3-319-40946-7_5).
6. Akim Demaille. Derived-term automata for extended weighted rational expressions. In *Proceedings of the Thirteenth International Colloquium on Theoretical Aspects of Computing (ICTAC)*, Lecture Notes in Computer Science, Taipei, Taiwan, October 2016. Springer.
7. Alexandre Duret-Lutz, Fabrice Kordon, Denis Poitrenaud, and Etienne Renault. Heuristics for checking liveness properties with partial order reductions. In *Proceedings of the 14th International Symposium on Automated Technology for Verification and Analysis (ATVA'16)*, volume 9938 of *Lecture Notes in Computer Science*, pages 340–356. Springer, October 2016. doi:[10.1007/978-3-319-46520-3_22](https://doi.org/10.1007/978-3-319-46520-3_22).
8. Alexandre Duret-Lutz, Alexandre Lewkowicz, Amaury Fauchille, Thibaud Michaud, Etienne Renault, and Laurent Xu. Spot 2.0 — a framework for LTL and ω -automata manipulation. In *Proceedings of the 14th International Symposium on Automated Technology for Verification and Analysis (ATVA'16)*, volume 9938 of *Lecture Notes in Computer Science*, pages 122–129. Springer, October 2016. doi:[10.1007/978-3-319-46520-3_8](https://doi.org/10.1007/978-3-319-46520-3_8).

9. Lê Duy Huỳnh, Yongchao Xu, and Thierry Géraud. Morphology-based hierarchical representation with application to text segmentation in natural images. In *Proceedings of the 23rd International Conference on Pattern Recognition (ICPR)*, pages 4029–4034, Cancún, México, December 2016. IEEE Computer Society. doi:[10.1109/ICPR.2016.7900264](https://doi.org/10.1109/ICPR.2016.7900264).
10. Baptiste Morel, Yongchao Xu, Alessio Virzi, Thierry Géraud, Catherine Adamsbaum, and Isabelle Bloch. A challenging issue: Detection of white matter hyperintensities in neonatal brain MRI. In *Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, pages 93–96, Orlando, Florida, USA, August 2016. doi:[10.1109/EMBC.2016.7590648](https://doi.org/10.1109/EMBC.2016.7590648).
11. Jim Newton, Akim Demaille, and Didier Verna. Type-checking of heterogeneous sequences in Common Lisp. In *European Lisp Symposium*, Kraków, Poland, May 2016.

1.9.3 Rapports de Recherche

1. Jim Newton. Finding maximal common joins in a DAG. Technical report, LRDE, Paris, France, November 2016.
2. Jim Newton. Monads in Common Lisp. Technical report, LRDE, Paris, France, November 2016.
3. Jim Newton. Efficient dynamic type checking of heterogeneous sequences. Technical Report 2005D002, LRDE, Paris, France, February 2016.

1.10 Année 2015

1.10.1 Revues

1. Edwin Carlinet and Thierry Géraud. MToS: A tree of shapes for multivariate images. *IEEE Transactions on Image Processing*, 24(12):5330–5342, December 2015. URL: [10.1109/TIP.2015.2480599](https://doi.org/10.1109/TIP.2015.2480599).

1.10.2 Conférences Internationales

1. Souheib Baarir and Alexandre Duret-Lutz. SAT-based minimization of deterministic ω -automata. In *Proceedings of the 20th International Conference on Logic for Programming, Artificial Intelligence, and Reasoning (LPAR'15)*, volume 9450 of *Lecture Notes in Computer Science*, pages 79–87. Springer, November 2015. doi:[10.1007/978-3-662-48899-7_6](https://doi.org/10.1007/978-3-662-48899-7_6).
2. Tomáš Babiak, František Blahoudek, Alexandre Duret-Lutz, Joachim Klein, Jan Křetínský, David Müller, David Parker, and Jan Strejček. The Hanoi Omega-Automata format. In *Proceedings of the 27th International Conference on Computer Aided Verification (CAV'15)*, volume 9206 of *Lecture Notes in Computer Science*, pages 479–486. Springer, July 2015. doi:[10.1007/978-3-319-21690-4_31](https://doi.org/10.1007/978-3-319-21690-4_31).
3. Ala Eddine Ben Salem and Mohamed Graiet. Combining explicit and symbolic LTL model checking using generalized testing automata. In *Proceedings of the 15th International Conference on Application of Concurrency to System Design (ACSD'15)*, Brussels, Belgium, June 2015. IEEE Computer Society.
4. Ala Eddine Ben Salem. Extending testing automata to all LTL. In *Proceedings of the 35th IFIP International Conference on Formal Techniques for Distributed Objects, Components and Systems (FORTE'15)*, volume 9039 of *Lecture Notes in Computer Science*, Grenoble, France, June 2015. Springer.
5. Ala Eddine Ben Salem. Single-pass testing automata for LTL model checking. In *Proceedings of the 9th International Conference on Language and Automata Theory and Applications (LATA'15)*, volume 8977 of *Lecture Notes in Computer Science*, pages 563–576, Nice, France, March 2015. Springer.

6. František Blahoudek, Alexandre Duret-Lutz, Vojtěch Rujbr, and Jan Strejček. On refinement of Büchi automata for explicit model checking. In *Proceedings of the 22th International SPIN Symposium on Model Checking of Software (SPIN'15)*, volume 9232 of *Lecture Notes in Computer Science*, pages 66–83. Springer, August 2015. doi:[10.1007/978-3-319-23404-5_6](https://doi.org/10.1007/978-3-319-23404-5_6).
7. Nicolas Boutry, Thierry Géraud, and Laurent Najman. How to make n D images well-composed without interpolation. In *Proceedings of the IEEE International Conference on Image Processing (ICIP)*, pages 2149–2153, Québec City, Canada, September 2015. doi:[10.1109/ICIP.2015.7351181](https://doi.org/10.1109/ICIP.2015.7351181).
8. Nicolas Boutry, Thierry Géraud, and Laurent Najman. How to make n D functions digitally well-composed in a self-dual way. In J.A. Benediktsson, J. Chanussot, L. Najman, and H. Talbot, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 12th International Symposium on Mathematical Morphology (ISMM)*, volume 9082 of *Lecture Notes in Computer Science Series*, pages 561–572, Reykjavik, Iceland, 2015. Springer. doi:[10.1007/978-3-319-18720-4_47](https://doi.org/10.1007/978-3-319-18720-4_47).
9. Stefania Calarasanu, Jonathan Fabrizio, and Séverine Dubuisson. Using histogram representation and earth mover’s distance as an evaluation tool for text detection. In *Proceedings of the 13th IAPR International Conference on Document Analysis and Recognition (ICDAR)*, pages 221–225, Nancy, France, August 2015. doi:[10.1109/ICDAR.2015.7333756](https://doi.org/10.1109/ICDAR.2015.7333756).
10. Edwin Carlinet and Thierry Géraud. Morphological object picking based on the color tree of shapes. In *Proceedings of 5th International Conference on Image Processing Theory, Tools and Applications (IPTA'15)*, pages 125–130, Orléans, France, November 2015. doi:[10.1109/IPTA.2015.7367111](https://doi.org/10.1109/IPTA.2015.7367111).
11. Edwin Carlinet and Thierry Géraud. A color tree of shapes with illustrations on filtering, simplification, and segmentation. In J.A. Benediktsson, J. Chanussot, L. Najman, and H. Talbot, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 12th International Symposium on Mathematical Morphology (ISMM)*, volume 9082 of *Lecture Notes in Computer Science Series*, pages 363–374, Reykjavik, Iceland, 2015. Springer. doi:[10.1007/978-3-319-18720-4_31](https://doi.org/10.1007/978-3-319-18720-4_31).
12. Séverine Dubuisson, Myriam Robert-Seidowsky, and Jonathan Fabrizio. A self-adaptive likelihood function for tracking with particle filter. In *Proceedings of the 10th International Conference on Computer Vision Theory and Applications (VISAPP)*, pages 446–453, March 2015. doi:[10.5220/0005260004460453](https://doi.org/10.5220/0005260004460453).
13. Thierry Géraud, Edwin Carlinet, and Sébastien Crozet. Self-duality and digital topology: Links between the morphological tree of shapes and well-composed gray-level images. In J.A. Benediktsson, J. Chanussot, L. Najman, and H. Talbot, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 12th International Symposium on Mathematical Morphology (ISMM)*, volume 9082 of *Lecture Notes in Computer Science Series*, pages 573–584, Reykjavik, Iceland, 2015. Springer. doi:[10.1007/978-3-319-18720-4_48](https://doi.org/10.1007/978-3-319-18720-4_48).
14. Thibaud Michaud and Alexandre Duret-Lutz. Practical stutter-invariance checks for ω -regular languages. In *Proceedings of the 22th International SPIN Symposium on Model Checking of Software (SPIN'15)*, volume 9232 of *Lecture Notes in Computer Science*, pages 84–101. Springer, August 2015. doi:[10.1007/978-3-319-23404-5_7](https://doi.org/10.1007/978-3-319-23404-5_7).
15. Etienne Renault, Alexandre Duret-Lutz, Fabrice Kordon, and Denis Poitrenaud. Parallel explicit model checking for generalized Büchi automata. In Christel Baier and Cesare Tinelli, editors, *Proceedings of the 19th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS'15)*, volume 9035 of *Lecture Notes in Computer Science*, pages 613–627. Springer, April 2015. doi:[10.1007/978-3-662-46681-0_56](https://doi.org/10.1007/978-3-662-46681-0_56).
16. Myriam Robert-Seidowsky, Jonathan Fabrizio, and Séverine Dubuisson. TextTrail: A robust text tracking algorithm in wild environments. In *Proceedings of the 10th International*

Conference on Computer Vision Theory and Applications (VISAPP), pages 268–276, March 2015. doi:[10.5220/0005292002680276](https://doi.org/10.5220/0005292002680276).

17. Didier Verna and François Ripault. Context-oriented image processing. In *Context-Oriented Programming Workshop*, 2015. doi:[10.1145/2786545.2786547](https://doi.org/10.1145/2786545.2786547).
18. Yongchao Xu, Edwin Carlinet, Thierry Géraud, and Laurent Najman. Efficient computation of attributes and saliency maps on tree-based image representations. In J.A. Benediktsson, J. Chanussot, L. Najman, and H. Talbot, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 12th International Symposium on Mathematical Morphology (ISMM)*, volume 9082 of *Lecture Notes in Computer Science Series*, pages 693–704, Reykjavik, Iceland, 2015. Springer. doi:[10.1007/978-3-319-18720-4_58](https://doi.org/10.1007/978-3-319-18720-4_58).

1.10.3 Conférences Nationales

1. Edwin Carlinet and Thierry Géraud. Une approche morphologique de segmentation interactive avec l'arbre des formes couleur. In *Actes du 15e Colloque GRETSI*, Lyon, France, September 2015.

1.11 Année 2014

1.11.1 Revues

1. Edwin Carlinet and Thierry Géraud. A comparative review of component tree computation algorithms. *IEEE Transactions on Image Processing*, 23(9):3885–3895, September 2014. URL: [10.1109/TIP.2014.2336551](https://doi.org/10.1109/TIP.2014.2336551).
2. Alexandre Duret-Lutz. LTL translation improvements in Spot 1.0. *International Journal on Critical Computer-Based Systems*, 5(1/2):31–54, March 2014. doi:[10.1504/IJCCBS.2014.059594](https://doi.org/10.1504/IJCCBS.2014.059594).
3. Guillaume Lazzara and Thierry Géraud. Efficient multiscale Sauvola's binarization. *International Journal of Document Analysis and Recognition (IJ DAR)*, 17(2):105–123, June 2014. doi:[10.1007/s10032-013-0209-0](https://doi.org/10.1007/s10032-013-0209-0).
4. Yongchao Xu, Thierry Géraud, Pascal Monasse, and Laurent Najman. Tree-based morse regions: A topological approach to local feature detection. *IEEE Transactions on Image Processing*, 23(12):5612–5625, December 2014. URL: [10.1109/TIP.2014.2364127](https://doi.org/10.1109/TIP.2014.2364127).

1.11.2 Conférences Internationales

1. Souheib Baarir and Alexandre Duret-Lutz. Mechanizing the minimization of deterministic generalized Büchi automata. In *Proceedings of the 34th IFIP International Conference on Formal Techniques for Distributed Objects, Components and Systems (FORTE'14)*, volume 8461 of *Lecture Notes in Computer Science*, pages 266–283. Springer, June 2014. doi:[10.1007/978-3-662-43613-4_17](https://doi.org/10.1007/978-3-662-43613-4_17).
2. Ala Eddine Ben Salem, Alexandre Duret-Lutz, Fabrice Kordon, and Yann Thierry-Mieg. Symbolic model checking of stutter invariant properties using generalized testing automata. In *Proceedings of the 20th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS'14)*, volume 8413 of *Lecture Notes in Computer Science*, pages 440–454, Grenoble, France, April 2014. Springer. doi:[10.1007/978-3-642-54862-8_38](https://doi.org/10.1007/978-3-642-54862-8_38).
3. František Blahoudek, Alexandre Duret-Lutz, Mojmir Křetínský, and Jan Strejček. Is there a best Büchi automaton for explicit model checking? In *Proceedings of the 21th International SPIN Symposium on Model Checking of Software (SPIN'14)*, pages 68–76. ACM, 2014. doi:[10.1145/2632362.2632377](https://doi.org/10.1145/2632362.2632377).

4. Nicolas Boutry, Thierry Géraud, and Laurent Najman. On making n D images well-composed by a self-dual local interpolation. In E. Barucci, A. Frosini, and S. Rinaldi, editors, *Proceedings of the 18th International Conference on Discrete Geometry for Computer Imagery (DGCI)*, volume 8668 of *Lecture Notes in Computer Science*, pages 320–331, Siena, Italy, September 2014. Springer. doi:[10.1007/978-3-319-09955-2_27](https://doi.org/10.1007/978-3-319-09955-2_27).
5. Edwin Carlinet and Thierry Géraud. Getting a morphological tree of shapes for multivariate images: Paths, traps and pitfalls. In *Proceedings of the 21st International Conference on Image Processing (ICIP)*, pages 615–619, Paris, France, 2014. doi:[10.1109/ICIP.2014.7025123](https://doi.org/10.1109/ICIP.2014.7025123).
6. Edwin Carlinet and Thierry Géraud. A morphological tree of shapes for color images. In *Proceedings of the 22nd International Conference on Pattern Recognition (ICPR)*, pages 1133–1137, Stockholm, Sweden, August 2014. doi:[10.1109/ICPR.2014.204](https://doi.org/10.1109/ICPR.2014.204).
7. Sébastien Crozet and Thierry Géraud. A first parallel algorithm to compute the morphological tree of shapes of n D images. In *Proceedings of the 21st International Conference on Image Processing (ICIP)*, pages 2933–2937, Paris, France, 2014. doi:[10.1109/ICIP.2014.7025593](https://doi.org/10.1109/ICIP.2014.7025593).
8. Najim Dehak, O. Plchot, M.H. Bahari, L. Burget, H. Van hamme, and Réda Dehak. GMM weights adaptation based on subspace approaches for speaker verification. In *Odyssey 2014, The Speaker and Language Recognition Workshop*, pages 48–53, Joensuu, Finland, June 2014.
9. Akim Demaille, Alexandre Duret-Lutz, Sylvain Lombardy, Luca Saiu, and Jacques Sakarovitch. A type system for weighted automata and rational expressions. In *Proceedings of Implementation and Application of Automata, 19th International Conference (CIAA'14)*, volume 8587 of *Lecture Notes in Computer Science*, Giessen, Germany, July 2014. Springer. doi:[10.1007/978-3-319-08846-4_12](https://doi.org/10.1007/978-3-319-08846-4_12).
10. Jonathan Fabrizio. A precise skew estimation algorithm for document images using KNN clustering and fourier transform. In *Proceedings of the 21st International Conference on Image Processing (ICIP)*, pages 2585–2588, Paris, France, 2014. doi:[10.1109/ICIP.2014.7025523](https://doi.org/10.1109/ICIP.2014.7025523).
11. Thierry Géraud. A morphological method for music score staff removal. In *Proceedings of the 21st International Conference on Image Processing (ICIP)*, pages 2599–2603, Paris, France, 2014. doi:[10.1109/ICIP.2014.7025526](https://doi.org/10.1109/ICIP.2014.7025526).
12. Guillaume Lazzara, Thierry Géraud, and Roland Levillain. Planting, growing and pruning trees: Connected filters applied to document image analysis. In *Proceedings of the 11th IAPR International Workshop on Document Analysis Systems (DAS)*, pages 36–40, Tours, France, April 2014. IAPR. doi:[10.1109/DAS.2014.36](https://doi.org/10.1109/DAS.2014.36).
13. Roland Levillain, Thierry Géraud, Laurent Najman, and Edwin Carlinet. Practical genericity: Writing image processing algorithms both reusable and efficient. In Eduardo Bayro and Edwin Hancock, editors, *Progress in Pattern Recognition, Image Analysis, Computer Vision, and Applications – Proceedings of the 19th Iberoamerican Congress on Pattern Recognition (CIARP)*, volume 8827 of *Lecture Notes in Computer Science*, pages 70–79, Puerto Vallarta, Mexico, November 2014. Springer-Verlag. doi:[10.1007/978-3-319-12568-8_9](https://doi.org/10.1007/978-3-319-12568-8_9).
14. Nicolas Widynski, Thierry Géraud, and Damien Garcia. Speckle spot detection in ultrasound images: Application to speckle reduction and speckle tracking. In *Proceedings of the IEEE International Ultrasonics Symposium (IUS)*, pages 1734–1737, Chicago, IL, USA, 2014. doi:[10.1109/ULTSYM.2014.0430](https://doi.org/10.1109/ULTSYM.2014.0430).
15. Yongchao Xu, Edwin Carlinet, Thierry Géraud, and Laurent Najman. Meaningful disjoint level lines selection. In *Proceedings of the 21st International Conference on Image Processing (ICIP)*, pages 2938–2942, Paris, France, 2014. doi:[10.1109/ICIP.2014.7025594](https://doi.org/10.1109/ICIP.2014.7025594).

1.11.3 Conférences Nationales

1. Yongchao Xu, Thierry Géraud, and Laurent Najman. Espaces des formes basés sur des arbres : définition et applications en traitement d'images et vision par ordinateur. In *Actes du 19ème Congrès National sur Reconnaissance des Formes et l'Intelligence Artificielle (RFIA)*, volume 1, Rouen, France, July 2014.

1.12 Année 2013

1.12.1 Revues

1. Jonathan Fabrizio, Beatriz Marcotegui, and Matthieu Cord. Text detection in street level image. *Pattern Analysis and Applications*, 16(4):519–533, November 2013.
2. S. Shum, Najim Dehak, Réda Dehak, and J. Glass. Unsupervised methods for speaker diarization: An integrated and iterative approach. *IEEE Transactions on Audio, Speech, and Language Processing*, 21(10):2015–2028, October 2013.

1.12.2 Conférences Internationales

1. Tomáš Babiak, Thomas Badie, Alexandre Duret-Lutz, Mojmír Křetínský, and Jan Strejček. Compositional approach to suspension and other improvements to LTL translation. In *Proceedings of the 20th International SPIN Symposium on Model Checking of Software (SPIN'13)*, volume 7976 of *Lecture Notes in Computer Science*, pages 81–98. Springer, July 2013. doi:10.1007/978-3-642-39176-7_6.
2. Edwin Carlinet and Thierry Géraud. A comparison of many max-tree computation algorithms. In C.L. Luengo Hendriks, G. Borgefors, and R. Strand, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 11th International Symposium on Mathematical Morphology (ISMM)*, volume 7883 of *Lecture Notes in Computer Science Series*, pages 73–85, Uppsala, Sweden, 2013. Springer.
3. Akim Demaille, Alexandre Duret-Lutz, Sylvain Lombardy, and Jacques Sakarovitch. Implementation concepts in Vaucanson 2. In Stavros Konstantinidis, editor, *Proceedings of Implementation and Application of Automata, 18th International Conference (CIAA'13)*, volume 7982 of *Lecture Notes in Computer Science*, pages 122–133, Halifax, NS, Canada, July 2013. Springer. doi:10.1007/978-3-642-39274-0_12.
4. Alexandre Duret-Lutz. Manipulating LTL formulas using Spot 1.0. In *Proceedings of the 11th International Symposium on Automated Technology for Verification and Analysis (ATVA'13)*, volume 8172 of *Lecture Notes in Computer Science*, pages 442–445, Hanoi, Vietnam, October 2013. Springer. doi:10.1007/978-3-319-02444-8_31.
5. Lukasz Fronc and Alexandre Duret-Lutz. LTL model checking with Neco. In *Proceedings of the 11th International Symposium on Automated Technology for Verification and Analysis (ATVA'13)*, volume 8172 of *Lecture Notes in Computer Science*, pages 451–454, Hanoi, Vietnam, October 2013. Springer. doi:10.1007/978-3-319-02444-8_33.
6. Thierry Géraud, Edwin Carlinet, Sébastien Crozet, and Laurent Najman. A quasi-linear algorithm to compute the tree of shapes of n -D images. In C.L. Luengo Hendriks, G. Borgefors, and R. Strand, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 11th International Symposium on Mathematical Morphology (ISMM)*, volume 7883 of *Lecture Notes in Computer Science Series*, pages 98–110, Uppsala, Sweden, 2013. Springer.
7. Laurent Najman and Thierry Géraud. Discrete set-valued continuity and interpolation. In C.L. Luengo Hendriks, G. Borgefors, and R. Strand, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 11th International Symposium on Mathematical Morphology (ISMM)*, volume 7883 of *Lecture Notes in Computer Science Series*, pages 37–48, Uppsala, Sweden, 2013. Springer.

8. Etienne Renault, Alexandre Duret-Lutz, Fabrice Kordon, and Denis Poitrenaud. Three SCC-based emptiness checks for generalized Büchi automata. In Ken McMillan, Aart Middeldorp, and Andrei Voronkov, editors, *Proceedings of the 19th International Conference on Logic for Programming, Artificial Intelligence, and Reasoning (LPAR'13)*, volume 8312 of *Lecture Notes in Computer Science*, pages 668–682. Springer, December 2013. doi:[10.1007/978-3-642-45221-5_44](https://doi.org/10.1007/978-3-642-45221-5_44).
9. Etienne Renault, Alexandre Duret-Lutz, Fabrice Kordon, and Denis Poitrenaud. Strength-based decomposition of the property Büchi automaton for faster model checking. In Nir Piterman and Scott A. Smolka, editors, *Proceedings of the 19th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS'13)*, volume 7795 of *Lecture Notes in Computer Science*, pages 580–593. Springer, March 2013. doi:[10.1007/978-3-642-36742-7_42](https://doi.org/10.1007/978-3-642-36742-7_42).
10. Didier Verna. The incredible tale of the author who didn't want to do the publisher's job. In Barbara Beeton and Karl Berry, editors, *TUGboat*, volume 34, 2013.
11. Didier Verna. TiCL: the prototype (Star \TeX : the next generation, season 2). In Barbara Beeton and Karl Berry, editors, *TUGboat*, volume 34, 2013.
12. Yongchao Xu, Thierry Géraud, and Laurent Najman. Salient level lines selection using the Mumford-Shah functional. In *Proceedings of the 20th International Conference on Image Processing (ICIP)*, pages 1227–1231, Melbourne, Australia, September 2013. IEEE.
13. Yongchao Xu, Thierry Géraud, and Laurent Najman. Two applications of shape-based morphology: blood vessels segmentation and a generalization of constrained connectivity. In C.L. Luengo Hendriks, G. Borgefors, and R. Strand, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 11th International Symposium on Mathematical Morphology (ISMM)*, volume 7883 of *Lecture Notes in Computer Science Series*, pages 390–401, Uppsala, Sweden, 2013. Springer.

1.13 Année 2012

1.13.1 Chapitres de livres

1. Didier Verna. Extensible languages: blurring the distinction between DSLs and GPLs. In Marjan Mernik, editor, *Formal and Practical Aspects of Domain-Specific Languages: Recent Developments*, chapter 1. IGI Global, September 2012. doi:[10.4018/978-1-4666-2092-6.ch001](https://doi.org/10.4018/978-1-4666-2092-6.ch001).

1.13.2 Revues

1. Ala Eddine Ben Salem, Alexandre Duret-Lutz, and Fabrice Kordon. Model checking using generalized testing automata. *Transactions on Petri Nets and Other Models of Concurrency (ToPNoC VI)*, 7400:94–112, 2012. doi:[10.1007/978-3-642-35179-2_5](https://doi.org/10.1007/978-3-642-35179-2_5).
2. Jonathan Fabrizio, Séverine Dubuisson, and Dominique Béréziat. Motion compensation based on tangent distance prediction for video compression. *Signal Processing: Image Communication*, 27(2):113–208, February 2012.

1.13.3 Conférences Internationales

1. Jonas Borgstrom, William Campbell, Najim Dehak, Réda Dehak, Daniel Garcia-Romero, Kara Greenfield and Alan McCree, Doug Reynold, Fred Richardson, Elliot Singery, Douglas Sturim, and Pedro A. Torres-Carrasquillo. MITLL 2012 speaker recognition evaluation system description. In *NIST Speaker Recognition Evaluation*, Orlando, December 2012.
2. Roland Levillain, Thierry Géraud, and Laurent Najman. Writing reusable digital topology algorithms in a generic image processing framework. In Ullrich Köthe, Annick Montanvert, and Pierre Soille, editors, *WADGMM 2010*, volume 7346 of *Lecture Notes in Computer Science*, pages 140–153. Springer-Verlag Berlin Heidelberg, 2012.

3. M. Sennoussaoui, Najim Dehak, P. Kenny, Réda Dehak, and P. Dumouchel. First attempt at Boltzmann machines for speaker recognition. In *Odyssey Speaker and Language Recognition Workshop*, Singapore, June 2012.
4. Laurent Senta, Christopher Chedeau, and Didier Verna. Generic image processing with Climb. In *European Lisp Symposium*, Zadar, Croatia, May 2012. doi:10.5281/zenodo.3248934.
5. Didier Verna. Star T_EX: the next generation. In Barbara Beeton and Karl Berry, editors, *TUGboat*, volume 33, 2012.
6. Yongchao Xu, Thierry Géraud, and Laurent Najman. Context-based energy estimator: Application to object segmentation on the tree of shapes. In *Proceedings of the 19th International Conference on Image Processing (ICIP)*, pages 1577–1580, Orlando, Florida, USA, October 2012. IEEE.
7. Yongchao Xu, Thierry Géraud, and Laurent Najman. Morphological filtering in shape spaces : Applications using tree-based image representations. In *Proceedings of the 21st International Conference on Pattern Recognition (ICPR)*, pages 485–488, Tsukuba Science City, Japan, November 2012. IEEE Computer Society.

1.13.4 Rapports de Recherche

1. Christopher Chedeau and Didier Verna. JSPP: Morphing C++ into JavaScript. Technical Report 201201-TR, EPITA Research and Development Laboratory, January 2012.

1.14 Année 2011

1.14.1 Revues

1. Najim Dehak, P. Kenny, Réda Dehak, P. Dumouchel, and P. Ouellet. Front-End Factor Analysis For Speaker Verification. *IEEE Transactions on Audio, Speech, and Language Processing*, 13(4):788–798, May 2011.

1.14.2 Conférences Internationales

1. Ala Eddine Ben Salem, Alexandre Duret-Lutz, and Fabrice Kordon. Generalized Büchi automata versus testing automata for model checking. In *Proceedings of the second International Workshop on Scalable and Usable Model Checking for Petri Net and other models of Concurrency (SUMO'11)*, volume 726 of *Workshop Proceedings*, Newcastle, UK, June 2011. CEUR. URL: <http://ftp.informatik.rwth-aachen.de/Publications/CEUR-WS/Vol-726/>.
2. Najim Dehak, Z. Karam, D. Reynolds, Réda Dehak, W. Campbell, and J. Glass. A Channel-Blind System for Speaker Verification. In *International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, pages 4536–4539, Prage, Czech Republic, May 2011.
3. Najim Dehak, Pedro A. Torres-Carrasquillo, Douglas Reynolds, and Reda Dehak. Language Recognition via I-Vectors and Dimensionality Reduction. In *INTERSPEECH 2011*, pages 857–860, Florence, Italy, August 2011.
4. Alexandre Duret-Lutz, Kais Klai, Denis Poitrenaud, and Yann Thierry-Mieg. Self-loop aggregation product — a new hybrid approach to on-the-fly LTL model checking. In *Proceedings of the 9th International Symposium on Automated Technology for Verification and Analysis (ATVA '11)*, volume 6996 of *Lecture Notes in Computer Science*, pages 336–350, Taipei, Taiwan, October 2011. Springer. doi:10.1007/978-3-642-24372-1_24.
5. Alexandre Duret-Lutz. LTL translation improvements in Spot. In *Proceedings of the 5th International Workshop on Verification and Evaluation of Computer and Communication Systems (VECoS'11)*, Electronic Workshops in Computing, Tunis, Tunisia, September 2011. British Computer Society. URL: <http://ewic.bcs.org/category/15853>.

6. Guillaume Lazzara, Roland Levillain, Thierry Géraud, Yann Jacquélet, Julien Marquegnies, and Arthur Crépin-Leblond. The SCRIBO module of the Olena platform: a free software framework for document image analysis. In *Proceedings of the 11th International Conference on Document Analysis and Recognition (ICDAR)*, pages 252–258, Beijing, China, September 2011. International Association for Pattern Recognition (IAPR).
7. Didier Verna. Biological realms in computer science: the way you don't (want to) think about them. In *Onward! 2011*, pages 167–176, 2011. doi:10.1145/2089131.2089140.
8. Didier Verna. Towards L^AT_EX coding standards. In Barbara Beeton and Karl Berry, editors, *TUGboat*, volume 32, pages 309–328, 2011.

1.14.3 Conférences Nationales

1. Roland Levillain, Thierry Géraud, and Laurent Najman. Une approche générique du logiciel pour le traitement d'images préservant les performances. In *Proceedings of the 23rd Symposium on Signal and Image Processing (GRETSI)*, Bordeaux, France, September 2011. In French.

1.14.4 Rapports de Recherche

1. Alexandre Duret-Lutz, Kais Klai, Denis Poitrenaud, and Yann Thierry-Mieg. Combining explicit and symbolic approaches for better on-the-fly LTL model checking. Technical Report 1106.5700, arXiv, June 2011. Extended version of our ATVA'11 paper, presenting two new techniques instead of one. URL: <http://arxiv.org/abs/1106.5700>.

1.15 Année 2010

1.15.1 Chapitres de livres

1. Thierry Géraud, Hugues Talbot, and Marc Van Droogenbroeck. Algorithms for mathematical morphology. In Laurent Najman and Hugues Talbot, editors, *Mathematical Morphology—From Theory to Applications*, pages 323–353. Wiley-ISTE, July 2010. URL: <http://eu.wiley.com/WileyCDA/WileyTitle/productCd-1848212151.html>.
2. Thierry Géraud, Hugues Talbot, and Marc Van Droogenbroeck. Morphologie et algorithmes. In Laurent Najman and Hugues Talbot, editors, *Morphologie mathématique 2 : estimation, choix et mise en œuvre*, IC2 signal et image, chapter 6, pages 151–180. Hermès Science Publications, September 2010.

1.15.2 Revues

1. Eelco Dolstra, Andres Löf, and Nicolas Pierron. NixOS: A purely functional Linux distribution. *Journal of Functional Programming*, 2010. Published online by Cambridge University Press 15 Oct 2010. doi:10.1017/S0956796810000195.
2. Didier Verna. Revisiting the visitor: the just do it pattern. *Journal of Universal Computer Science*, 16:246–271, 2010. doi:10.3217/jucs-016-02-0246.

1.15.3 Conférences Internationales

1. Réda Dehak and Najim Dehak. Lrde Speaker Recognition System for NIST-SRE 2010. In *NIST 2010 Speaker Recognition Evaluation*, Brno, CZ, 2010.
2. Najim Dehak, Réda Dehak, J. Glass, D. Reynolds, and P. Kenny. Cosine Similarity Scoring without Score Normalization Techniques. In *Odyssey The Speaker and Language Recognition*, Brno, Czech Republic, 2010.

3. S. Shum, Najim Dehak, Réda Dehak, and J. Glass. Unsupervised Speaker Adaptation based on the Cosine Similarity for Text-Independent Speaker Verification. In *Odyssey The Speaker and Language Recognition*, Brno, Czech Republic, 2010.
4. Roland Levillain, Thierry Géraud, and Laurent Najman. Why and how to design a generic and efficient image processing framework: The case of the Milena library. In *Proceedings of the IEEE International Conference on Image Processing (ICIP)*, pages 1941–1944, Hong Kong, September 2010.
5. Roland Levillain, Thierry Géraud, and Laurent Najman. Writing reusable digital geometry algorithms in a generic image processing framework. In *Proceedings of the Workshop on Applications of Digital Geometry and Mathematical Morphology (WADGMM)*, pages 96–100, Istanbul, Turkey, August 2010. URL: <http://mdigest.jrc.ec.europa.eu/wadgmm2010/>.
6. Alban Linard, Emmanuel Paviot-Adet, Fabrice Kordon, Didier Buchs, and Samuel Charron. polyDD: Towards a framework generalizing decision diagrams. In *Proceedings of the 10th International Conference on Application of Concurrency to System Design (ACSD)*, pages 124–133, Braga, Portugal, June 2010. IEEE Computer Society.
7. Rodrigo Minetto, Nicolas Thome, Matthieu Cord, Jonathan Fabrizio, and Beatriz Marcotegui. SnooperText: A multiresolution system for text detection in complex visual scenes. In *Proceedings of the IEEE International Conference on Image Processing (ICIP)*, pages 3861–3864, Hong Kong, September 2010.
8. Didier Verna. CLoX: Common Lisp objects for XEmacs. In *Proceedings of the 3rd European Lisp Symposium*, Lisbon, Portugal, May 2010. doi:10.5281/zenodo.3248958.
9. Didier Verna. Classes, styles, conflicts: the biological realm of L^AT_EX. In Barbara Beeton and Karl Berry, editors, *TUGboat*, volume 31, pages 162–172, 2010.

1.16 Année 2009

1.16.1 Revues

1. Alexandre Hamez, Yann Thierry-Mieg, and Fabrice Kordon. Building efficient model checkers using hierarchical set decision diagrams and automatic saturation. *Fundamenta Informaticae*, 2009.

1.16.2 Conférences Internationales

1. Najim Dehak, Patrick Kenny, Réda Dehak, Ondrej Glembek, Pierre Dumouchel, Lukas Burget, Valiantsina Hubeika, and Fabio Castaldo. Support vector machines and joint factor analysis for speaker verification. In *IEEE-ICASSP*, Taipei - Taiwan, April 2009.
2. Najim Dehak, Réda Dehak, Patrick Kenny, Niko Brummer, Pierre Ouellet, and Pierre Dumouchel. Support vector machines versus fast scoring in the low-dimensional total variability space for speaker verification. In *Interspeech*, September 2009.
3. Pierre Dumouchel, Najim Dehak, Yazid Attabi, Réda Dehak, and Narjès Boufaden. Cepstral and long-term features for emotion recognition. In *Interspeech*, September 2009. Open Performance Sub-Challenge Prize.
4. Akim Demaille, Alexandre Duret-Lutz, Florian Lesaint, Sylvain Lombardy, Jacques Sakarovitch, and Florent Terrones. An XML format proposal for the description of weighted automata, transducers, and regular expressions. In Jakub Piskorski, Bruce W. Watson, and Anssi Yli-Jyrä, editors, *Post-proceedings of the seventh international workshop on Finite-State Methods and Natural Language Processing (FSMNL'08)*, volume 19 of *Frontiers in Artificial Intelligence and Applications*, pages 199–206, Ispra, Italia, September 2009. IOS Press.
5. Akim Demaille, Roland Levillain, and Benoît Sigoure. TWEAST: A simple and effective technique to implement concrete-syntax AST rewriting using partial parsing. In *Proceedings*

of the 24th Annual ACM Symposium on Applied Computing (SAC'09), pages 1924–1929, Waikiki Beach, Honolulu, Hawaii, USA, March 2009.

6. Alexandre Duret-Lutz, Denis Poitrenaud, and Jean-Michel Couvreur. On-the-fly emptiness check of transition-based Streett automata. In Zhiming Liu and Anders P. Ravn, editors, *Proceedings of the 7th International Symposium on Automated Technology for Verification and Analysis (ATVA'09)*, volume 5799 of *Lecture Notes in Computer Science*, pages 213–227. Springer-Verlag, 2009. doi:10.1007/978-3-642-04761-9_17.
7. Roland Levillain, Thierry Géraud, and Laurent Najman. Milena: Write generic morphological algorithms once, run on many kinds of images. In Michael H. F. Wilkinson and Jos B. T. M. Roerdink, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the Ninth International Symposium on Mathematical Morphology (ISMM)*, volume 5720 of *Lecture Notes in Computer Science*, pages 295–306, Groningen, The Netherlands, August 2009. Springer Berlin / Heidelberg.
8. Didier Verna. Revisiting the visitor: the just do it pattern. In *Proceedings of the ACCU Conference 2009*, Oxford, 2009.
9. Didier Verna. CLOS efficiency: Instantiation. In *Proceedings of the International Lisp Conference*, pages 76–90. Association of Lisp Users, March 2009.

1.17 Année 2008

1.17.1 Revues

1. Didier Verna. Binary methods programming: the CLOS perspective (extended version). *Journal of Universal Computer Science*, 14(20):3389–3411, 2008. doi:10.3217/jucs-014-20-3389.

1.17.2 Conférences Internationales

1. Jérôme Darbon. Global optimization for first order Markov random fields with submodular priors. In *Proceedings of the twelfth International Workshop on Combinatorial Image Analysis (IWCIA'08)*, Buffalo, New York, USA, April 2008.
2. Réda Dehak, Najim Dehak, and Patrick Kenny. The LRDE systems for the 2008 NIST speaker recognition evaluation. In *NIST-SRE 2008*, Montréal, Canada, June 2008.
3. Réda Dehak, Najim Dehak, Patrick Kenny, and Pierre Dumouchel. Kernel combination for SVM speaker verification. In *Proceedings of the Speaker and Language Recognition Workshop (IEEE-Odyssey 2008)*, Stellenbosch, South Africa, January 2008.
4. Najim Dehak, Réda Dehak, Patrick Kenny, and Pierre Dumouchel. Comparison between factor analysis and GMM support vector machines for speaker verification. In *Proceedings of the Speaker and Language Recognition Workshop (IEEE-Odyssey 2008)*, Stellenbosch, South Africa, January 2008.
5. Akim Demaille, Roland Levillain, and Benoît Perrot. A set of tools to teach compiler construction. In *Proceedings of the Thirteenth Annual Conference on Innovation and Technology in Computer Science Education (ITICSE'08)*, pages 68–72, Universidad Politécnica de Madrid, Spain, June 2008.
6. Akim Demaille, Renaud Durlin, Nicolas Pierron, and Benoît Sigoure. Semantics driven disambiguation: A comparison of different approaches. In *Proceedings of the 8th workshop on Language Descriptions, Tools and Applications (LDTA'08)*, 2008.
7. Thierry Géraud and Roland Levillain. Semantics-driven genericity: A sequel to the static C++ object-oriented programming paradigm (SCOOP 2). In *Proceedings of the 6th International Workshop on Multiparadigm Programming with Object-Oriented Languages (MPOOL)*, Paphos, Cyprus, July 2008.

8. Alexandre Hamez, Yann Thierry-Mieg, and Fabrice Kordon. Hierarchical set decision diagrams and automatic saturation. In *Petri Nets and Other Models of Concurrency –ICATPN 2008*, 2008.
9. Sébastien Hémon, Michel de Rougemont, and Miklos Santha. Approximate Nash equilibria for multi-player games. In *1st International Symposium on Algorithmic Games Theory*, Paderborn, Germany, April 2008.
10. Patrick Kenny, Najim Dehak, Réda Dehak, Vishwa Gupta, and Pierre Dumouchel. The role of speaker factors in the NIST extended data task. In *Proceedings of the Speaker and Language Recognition Workshop (IEEE-Odyssey 2008)*, Stellenbosch, South Africa, January 2008.
11. Cuong Le Quoc, Patrick Bellot, and Akim Demaille. Towards the world-wide quantum network. In *Proceedings of the 4th Information Security Practice and Experience Conference (ISPEC'08)*, Sydney, Australia, April 2008.
12. Olivier Ricou. A survey of French local e-democracy. In *Proceedings of the 8th European Conference on e-Government (ECEG)*, July 2008.
13. Didier Verna. Binary methods programming: the CLOS perspective. In *Proceedings of the First European Lisp Symposium*, pages 91–105, Bordeaux, France, May 2008. doi: [10.5281/zenodo.3248977](https://doi.org/10.5281/zenodo.3248977).
14. Didier Verna, Charlotte Herzeel, Christophe Rhodes, and Hans Hübner. Report on the 5th workshop ELW at ECOOP 2008. In Patrick Eugster, editor, *Object-Oriented Technology. ECOOP 2008 Workshop Reader*, volume 5475 of *Lecture Notes in Computer Science*, pages 1–6. Springer, July 2008.

1.18 Année 2007

1.18.1 Revues

1. Sophie Laplante, Richard Lassaigne, Frédéric Magniez, Sylvain Peyronnet, and Michel de Rougemont. Probabilistic abstraction for model checking: an approach based on property testing. *ACM Transactions on Computational Logic*, 8(4), August 2007.

1.18.2 Conférences Internationales

1. Christophe Berger, Thierry Géraud, Roland Levillain, Nicolas Widynski, Anthony Baillard, and Emmanuel Bertin. Effective component tree computation with application to pattern recognition in astronomical imaging. In *Proceedings of the IEEE International Conference on Image Processing (ICIP)*, volume 4, pages 41–44, San Antonio, TX, USA, September 2007.
2. Jérôme Darbon, Marc Sigelle, and Florence Tupin. The use of levelable regularization functions for MRF restoration of SAR images. In *Proceedings of the 19th Symposium SPIE on Electronic Imaging*, San Jose, CA, USA, January 2007.
3. Jérôme Darbon. A note on the discrete binary Mumford-Shah model. In *Proceedings of the international Computer Vision / Computer Graphics Collaboration Techniques and Applications (MIRAGE 2007)*, Paris, France, March 2007.
4. Réda Dehak, Najim Dehak, Patrick Kenny, and Pierre Dumouchel. Linear and non linear kernel GMM supervector machines for speaker verification. In *Proceedings of the European Conference on Speech Communication and Technologies (Interspeech'07)*, Antwerp, Belgium, August 2007.
5. Geoffroy Fouquier, Jamal Atif, and Isabelle Bloch. Local reasoning in fuzzy attribute graphs for optimizing sequential segmentation. In F. Escolano and M. Vento, editors, *Proceedings of the 6th IAPR TC-15 Workshop on Graph-based Representations in Pattern Recognition (GBR)*, volume LNCS 4538, pages 138–147, Alicante, Spain, June 2007. Springer Verlag.

6. Geoffroy Fouquier, Laurence Likforman, Jérôme Darbon, and Bulent Sankur. The biosecure geometry-based system for hand modality. In *Proceedings of the 32nd IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, volume I, pages 801–804, Honolulu, Hawaii, USA, April 2007.
7. Alexandre Hamez, Fabrice Kordon, and Yann Thierry-Mieg. libDMC: a library to operate efficient distributed model checking. In *Workshop on Performance Optimization for High-Level Languages and Libraries — associated to IPDPS'2007*, 2007.
8. Cuong Le Quoc, Patrick Bellot, and Akim Demaille. On the security of quantum networks: a proposal framework and its capacity. In *Proceedings of the 2007 International Conference on New Technologies, Mobility and Security (NTMS'07)*, Paris, France, May 2007.
9. Cuong Le Quoc, Patrick Bellot, and Akim Demaille. Stochastic routing in large grid-shaped quantum networks. In *Proceedings of the Fifth International Conference on Computer Sciences, Research, Innovation and Vision for the Future (RIVF'07)*, Hanoi, Vietnam, March 2007.
10. Olivier Ricou, Anthony Baillard, Emmanuel Bertin, Frederic Magnard, Chiara Marmo, and Yannick Mellier. Web services at TERAPIX. In *Proceedings of the XVII conference on Astronomical Data Analysis Software & Systems (ADASS)*, September 2007.
11. Olivier Ricou. 10 years of confrontation between French Internet users and their successive governments. In *Proceedings of the 7th European Conference on e-Government (ECEG)*, June 2007.
12. Didier Verna. CLOS solutions to binary methods. In *Proceedings of the International MultiConference of Engineers and Computer Scientists*, Hong Kong, March 2007. International Association of Engineers.

1.18.3 Conférences Nationales

1. Anthony Baillard, Christophe Berger, Emmanuel Bertin, Thierry Géraud, Roland Levillain, and Nicolas Widynski. Algorithme de calcul de l'arbre des composantes avec applications à la reconnaissance des formes en imagerie satellitaire. In *Proceedings of the 21st Symposium on Signal and Image Processing (GRETSI)*, Troyes, France, September 2007.

1.19 Année 2006

1.19.1 Chapitres de livres

1. Marie Duflot, Marta Kwiatkowska, Gethin Norman, Dave Parker, Sylvain Peyronnet, Claudine Picaronny, and Jeremy Sproston. Practical application of probabilistic model checking to communication protocols. In Stefania Gnesi and Tiziana Margaria, editors, *FMICS Handbook on Industrial Critical Systems*, chapter 7. 2006. To appear.

1.19.2 Revues

1. Alexandre Borghi, Valentin David, and Akim Demaille. C-Transformers — A framework to write C program transformations. *ACM Crossroads*, 12(3), Spring 2006. <http://www.acm.org/crossroads/xrds12-3/contractc.html>.
2. Jérôme Darbon and Marc Sigelle. Image restoration with discrete constrained Total Variation—part I: Fast and exact optimization. *Journal of Mathematical Imaging and Vision*, 26(3):261–276, December 2006.
3. Jérôme Darbon and Marc Sigelle. Image restoration with discrete constrained Total Variation—part II: Levelable functions, convex priors and non-convex case. *Journal of Mathematical Imaging and Vision*, 26(3):277–291, December 2006.
4. Didier Verna. How to make lisp go faster than C. *IAENG International Journal of Computer Science*, 32(4), December 2006.

5. Didier Verna. 2006(3), August 2006.
6. Erdem Yörük, Ender Konukoglu, Bülent Sankur, and Jérôme Darbon. Shape-based hand recognition. *IEEE Transactions on Image Processing*, 15(7):1803–1815, July 2006.

1.19.3 Conférences Internationales

1. Michaël Cadilhac, Thomas Héroult, Richard Lassaigne, Sylvain Peyronnet, and Sebastien Tixeuil. Evaluating complex MAC protocols for sensor networks with APMC. In *Proceedings of the 6th International Workshop on Automated Verification of Critical Systems (AVoCS)*, volume 185 of *Electronic Notes in Theoretical Computer Science Series*, pages 33–46, 2006.
2. Mickael Chekroun, Jérôme Darbon, and Igor Ciril. On a polynomial vector field model for shape representation. In *Proceedings of the International Conference on Image Analysis and Recognition (ICIAR)*, Povoá de Varzim, Portugal, September 2006. Springer-Verlag.
3. Jérôme Darbon, Richard Lassaigne, and Sylvain Peyronnet. Approximate probabilistic model checking for programs. In *Proceedings of the IEEE 2nd International Conference on Intelligent Computer Communication and Processing (ICCP'06)*, Technical University of Cluj-Napoca, Romania, September 2006.
4. Jérôme Darbon and Marc Sigelle. Fast and exact discrete image restoration based on total variation and on its extensions to levelable potentials. In *SIAM Conference on Imaging Sciences*, Minneapolis, USA, May 2006.
5. Valentin David, Akim Demaille, and Olivier Gournet. Attribute grammars for modular disambiguation. In *Proceedings of the IEEE 2nd International Conference on Intelligent Computer Communication and Processing (ICCP'06)*, Technical University of Cluj-Napoca, Romania, September 2006.
6. Réda Dehak, Charles-Alban Deledalle, and Najim Dehak. LRDE system description. In *NIST SRE'06 Workshop: speaker recognition evaluation campaign*, San Juan, Puerto Rico, June 2006.
7. Akim Demaille, Sylvain Peyronnet, and Benoît Sigoure. Modeling of sensor networks using XRM. In *Proceedings of the 2nd International Symposium on Leveraging Applications of Formal Methods, Verification and Validation (ISoLA'06)*, Coral Beach Resort, Paphos, Cyprus, November 2006.
8. Akim Demaille, Sylvain Peyronnet, and Thomas Héroult. Probabilistic verification of sensor networks. In *Proceedings of the Fourth International Conference on Computer Sciences, Research, Innovation and Vision for the Future (RIVF'06)*, Ho Chi Minh City, Vietnam, February 2006.
9. Alain Denise, Marie-Claude Gaudel, Sandrine-Dominique Gouraud, Richard Lassaigne, and Sylvain Peyronnet. Uniform random sampling of traces in very large models. In *Proceedings of the 1st international workshop on Random Testing 2006 (RT06)*, ACM digital library, pages 10–19, 2006.
10. Thomas Héroult, Richard Lassaigne, and Sylvain Peyronnet. APMC 3.0: Approximate verification of discrete and continuous time markov chains. In *Proceedings of Qest 2006*, pages 129–130, 2006.
11. David Lesage, Jérôme Darbon, and Ceyhun Burak Akgül. An efficient algorithm for connected attribute thinnings and thickenings. In *Proceedings of the second International Conference on Visual Computing*, volume 4292 of *Lecture Notes in Computer Science Series*, pages 393–404, Lake Tahoe, Nevada, USA, November 2006. Springer-Verlag.
12. Patrick Perrot, Réda Dehak, and Gérard Chollet. ENST-IRCGN system description. In *NIST SRE'06 Workshop: speaker recognition evaluation campaign*, San Juan, Puerto Rico, June 2006.

13. Didier Verna. Beating C in scientific computing applications. In *Third European Lisp Workshop at ECOOP*, Nantes, France, July 2006. Best paper award.
14. Didier Verna. How to make lisp go faster than C. In *Proceedings of the International Multi-Conference of Engineers and Computer Scientists*, Hong Kong, June 2006. International Association of Engineers.

1.19.4 Rapports de Recherche

1. Jérôme Darbon, Marc Sigelle, and Florence Tupin. A note on nice-levelable MRFs for SAR image denoising with contrast preservation. Technical Report 2006D006, Signal and Image Processing Group, Ecole Nationale Supérieure des Télécommunications, Paris, France, September 2006.

1.20 Année 2005

1.20.1 Revues

1. Isabelle Bloch, Olivier Colliot, Oscar Camara, and Thierry Géraud. Fusion of spatial relationships for guiding recognition, example of brain structure recognition in 3D MRI. *Pattern Recognition Letters*, 26(4):449–457, March 2005. doi:10.1016/j.patrec.2004.08.009.
2. Réda Dehak, Isabelle Bloch, and Henri Maître. Spatial reasoning with relative incomplete information on relative positioning. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 27(9):1473–1484, September 2005.

1.20.2 Conférences Internationales

1. Anthony Baillard, Emmanuel Bertin, Yannic Mellier, Henry Joy McCracken, Thierry Géraud, Roser Pelló, Jean-François LeBorgne, and Pascal Fouqué. Project EFIGI: Automatic classification of galaxies. In Carlos Gabriel, Christophe Arviset, Daniel Ponz, and Enrique Solano, editors, *Astronomical Data Analysis Software and Systems XV*, volume 351 of *Conference*, pages 236–239. Astronomical Society of the Pacific, 2005. URL: http://www.aspbbooks.org/custom/publications/paper/index.phtml?paper_id=3398.
2. Thomas Claveirole, Sylvain Lombardy, Sarah O'Connor, Louis-Noël Pouchet, and Jacques Sakarovitch. Inside Vaucanson. In Springer-Verlag, editor, *Proceedings of Implementation and Application of Automata, 10th International Conference (CIAA)*, volume 3845 of *Lecture Notes in Computer Science Series*, pages 117–128, Sophia Antipolis, France, June 2005.
3. Jérôme Darbon and Ceyhun Burak Akgül. An efficient algorithm for attribute openings and closings. In *Proceedings of the 13th European Signal Processing Conference (EUSIPCO)*, Antalya, Turkey, September 2005.
4. Jérôme Darbon and Marc Sigelle. A fast and exact algorithm for total variation minimization. In *Proceedings of the 2nd Iberian Conference on Pattern Recognition and Image Analysis (IbPRIA)*, volume 3522, pages 351–359, Estoril, Portugal, June 2005. Springer-Verlag.
5. Jérôme Darbon. Total variation minimization with l^1 data fidelity as a contrast invariant filter. In *Proceedings of the 4th International Symposium on Image and Signal Processing and Analysis (ISPA 2005)*, pages 221–226, Zagreb, Croatia, September 2005.
6. Jérôme Darbon and Sylvain Peyronnet. A vectorial self-dual morphological filter based on total variation minimization. In *Proceedings of the First International Conference on Visual Computing*, volume 3804 of *Lecture Notes in Computer Science Series*, pages 388–395, Lake Tahoe, Nevada, USA, December 2005. Springer-Verlag.

7. Akim Demaille. Making compiler construction projects relevant to core curriculums. In *Proceedings of the Tenth Annual Conference on Innovation and Technology in Computer Science Education (ITICSE'05)*, pages 266–270, Universidade Nova de Lisboa, Monte da Pacarita, Portugal, June 2005.
8. Thierry Géraud. Ruminations on Tarjan’s Union-Find algorithm and connected operators. In *Proceedings of the 7th International Symposium on Mathematical Morphology (ISMM'05)*, volume 30 of *Computational Imaging and Vision*, pages 105–116, Paris, France, April 2005. Springer.
9. Guillaume Guirado, Thomas Herault, Richard Lassaigne, and Sylvain Peyronnet. Distribution, approximation and probabilistic model checking. In *Proceedings of the 4th international workshop on Parallel and Distributed Model Checking (PDMC)*, 2005.
10. Richard Lassaigne and Sylvain Peyronnet. Probabilistic verification and approximation. In *Proceedings of 12th Workshop on Logic, Language, Information and Computation (Wollic)*, volume 143 of *Electronic Notes in Theoretical Computer Science*, pages 101–114, 2005.

1.20.3 Rapports de Recherche

1. Jérôme Darbon and Marc Sigelle. A fast and exact algorithm for total variation minimization. Technical Report 2005D002, ENST, Paris, France, January 2005.

1.21 Année 2004

1.21.1 Revues

1. Thierry Géraud and Jean-Baptiste Mouret. Fast road network extraction in satellite images using mathematical morphology and Markov random fields. *EURASIP Journal on Applied Signal Processing*, 2004(16):2503–2514, November 2004. Special issue on Nonlinear Signal and Image Processing - Part II. doi:<http://doi.acm.org/10.1155/S1110865704409093>.
2. Sylvain Lombardy, Yann Régis-Gianas, and Jacques Sakarovitch. Introducing Vaucanson. *Theoretical Computer Science*, 328:77–96, November 2004.

1.21.2 Conférences Internationales

1. Jérôme Darbon, Thierry Géraud, and Patrick Bellot. Generic algorithmic blocks dedicated to image processing. In *Proceedings of the ECOOP Workshop for PhD Students*, Oslo, Norway, June 2004.
2. Jérôme Darbon and Marc Sigelle. Exact optimization of discrete constrained total variation minimization problems. In *Proceedings of the 10th International Workshop on Combinatorial Image Analysis (IWCIA)*, volume 3322 of *Lecture Notes in Computer Science Series*, pages 548–557, Auckland, New Zealand, December 2004. Springer-Verlag.
3. Marie Dufflot, Laurent Fribourg, Thomas Herault, Richard Lassaigne, Frédéric Magniette, Stephane Messika, Sylvain Peyronnet, and Claudine Picaronny. Probabilistic model checking of the CSMA/CD, protocol using PRISM and APMC. In *Proceedings of the 4th International Workshop on Automated Verification of Critical Systems (AVoCS)*, volume 128 of *Electronic Notes in Theoretical Computer Science Series*, pages 195–214, 2004.
4. Thierry Géraud, Giovanni Palma, and Niels Van Vliet. Fast color image segmentation based on levellings in feature space. In Kluwer Academic Publishers, editor, *Computer Vision and Graphics—International Conference on Computer Vision and Graphics (ICCVG)*, Warsaw, Poland, September 2004, volume 32 of *Computational Imaging and Vision*, pages 800–807, 2004. On CD.
5. Emmanuel Grosicki, Karim Abed-Meraim, and Réda Dehak. A novel method to fight the non line of sight error in AOA measurements for mobile location. In *Proceedings of the*

IEEE International Conference on Communications (ICC), volume 5, pages 2794–2798, Paris, France, June 2004.

6. Francis Maes. Metagene, a C++ meta-program generation tool. In *Proceedings of the Workshop on Multiple Paradigm with OO Languages (MPOOL; in conjunction with ECOOP)*, Oslo, Norway, June 2004.
7. Erdem Yoruk, Ender Konukoglu, Bulent Sankur, and Jérôme Darbon. Person authentication based on hand shape. In *Proceedings of 12th European Signal Processing Conference (EUSIPCO)*, Vienna, Austria, September 2004.

1.21.3 Rapports de Recherche

1. Jérôme Darbon and Marc Sigelle. Exact optimization of discrete constrained total variation minimization problems. Technical Report 2004C004, ENST, Paris, France, October 2004.
2. Sylvain Lefebvre, Jérôme Darbon, and Fabrice Neyret. Unified texture management for arbitrary meshes. Technical Report RR-5210, INRIA-Rhone-Alpes, France, May 2004.
3. The VAUCANSON group. Proposal: an XML representation for automata. Technical Report 0414, EPITA Research and Development Laboratory (LRDE), France, November 2004. URL: <http://www.lrde.epita.fr/cgi-bin/twiki/view/Publications/200414-TR>.

1.22 Année 2003

1.22.1 Revues

1. Isabelle Bloch, Thierry Géraud, and Henri Maître. Representation and fusion of heterogeneous fuzzy information in the 3D space for model-based structural recognition—application to 3D brain imaging. *Artificial Intelligence*, 148(1-2):141–175, August 2003. doi:10.1016/S0004-3702(03)00018-3.

1.22.2 Conférences Internationales

1. Nicolas Burrus, Alexandre Duret-Lutz, Thierry Géraud, David Lesage, and Raphaël Poss. A static C++ object-oriented programming (SCOOP) paradigm mixing benefits of traditional OOP and generic programming. In *Proceedings of the Workshop on Multiple Paradigm with Object-Oriented Languages (MPOOL)*, Anaheim, CA, USA, October 2003.
2. Thierry Géraud, Geoffroy Fouquier, Quoc Peyrot, Nicolas Lucas, and Franck Signorile. Document type recognition using evidence theory. In *Proceedings of the 5th IAPR International Workshop on Graphics Recognition (GREC)*, pages 212–221, Computer Vision Center, UAB, Barcelona, Spain, July 2003.
3. Thierry Géraud. Segmentation of curvilinear objects using a watershed-based curve adjacency graph. In Springer-Verlag, editor, *Proceedings of the 1st Iberian Conference on Pattern Recognition and Image Analysis (IbPRIA)*, volume 2652 of *Lecture Notes in Computer Science Series*, pages 279–286, Mallorca, Spain, June 2003. Springer-Verlag.
4. Thierry Géraud. Segmentation d’objets curvilignes à l’aide des champs de markov sur un graphe d’adjacence de courbes issu de l’algorithme de la ligne de partage des eaux. In *Proceedings of the International Conference on Image and Signal Processing (ICISP)*, volume 2, pages 404–411, Agadir, Morocco, June 2003. Faculty of Sciences at Ibn Zohr University, Morocco. In French.
5. Thierry Géraud. Fast road network extraction in satellite images using mathematical morphology and MRF. In *Proceedings of the EURASIP Workshop on Nonlinear Signal and Image Processing (NSIP)*, Trieste, Italy, June 2003.
6. Sylvain Lombardy, Raphaël Poss, Yann Régis-Gianas, and Jacques Sakarovitch. Introducing Vaucanson. In Oscar H. Ibarra and Zhe Dang, editors, *Proceedings of Implementation and*

Application of Automata, 8th International Conference (CIAA '03), volume 2759 of *Lecture Notes in Computer Science*, pages 96–107, Santa Barbara, CA, USA, July 2003. Springer.

7. Francis Maes. Program templates: expression templates applied to program evaluation. In Jörg Striegnitz and Kei Davis, editors, *Proceedings of the Workshop on Declarative Programming in the Context of Object-Oriented Languages (DP-COOL; in conjunction with PLI)*, number FZJ-ZAM-IB-2003-10 in John von Neumann Institute for Computing (NIC), pages 67–86, Uppsala, Sweden, August 2003.
8. Yann Régis-Gianas and Raphaël Poss. On orthogonal specialization in C++: dealing with efficiency and algebraic abstraction in Vaucanson. In Jörg Striegnitz and Kei Davis, editors, *Proceedings of the Parallel/High-performance Object-Oriented Scientific Computing (POOSC; in conjunction with ECOOP)*, number FZJ-ZAM-IB-2003-09 in John von Neumann Institute for Computing (NIC), pages 71–82, Darmstadt, Germany, July 2003.
9. Heru Xue, Thierry Géraud, and Alexandre Duret-Lutz. Multi-band segmentation using morphological clustering and fusion application to color image segmentation. In *Proceedings of the IEEE International Conference on Image Processing (ICIP)*, volume 1, pages 353–356, Barcelona, Spain, September 2003.

1.23 Année 2002

1.23.1 Conférences Internationales

1. Sébastien Carrier. Polar type inference with intersection types and ω . In *Proceedings of the 2nd Workshop on Intersection Types and Related Systems (ITRS)*, published in: *Electronic Notes in Theoretical Computer Science*, volume 70, Copenhagen, Denmark, July 2002. Elsevier.
2. Jérôme Darbon, Thierry Géraud, and Alexandre Duret-Lutz. Generic implementation of morphological image operators. In *Mathematical Morphology, Proceedings of the 6th International Symposium (ISMM)*, pages 175–184, Sydney, Australia, April 2002. CSIRO Publishing.

1.24 Année 2001

1.24.1 Conférences Internationales

1. Alexis Angelidis and Geoffroy Fouquier. Visualization issues in virtual environments: from computer graphics techniques to intentional visualization. In V. Skala, editor, *Proceedings of the 9th International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG)*, volume 3, pages 90–98, Plzen, Czech Republic, February 2001.
2. Jérôme Darbon, Bulent Sankur, and Henri Maître. Error correcting code performance for watermark protection. In *Proceedings of the 13th Symposium SPIE on Electronic Imaging—Security and Watermarking of Multimedia Contents III (EI27)*, volume 4314, pages 663–672, San Jose, CA, USA, January 2001.
3. Alexandre Duret-Lutz. Expression templates in Ada 95. In *Proceedings of the 6th International Conference on Reliable Software Technologies (Ada-Europe)*, volume 2043 of *Lecture Notes in Computer Science Series*, pages 191–202, Leuven, Belgium, May 2001. Springer-Verlag. Best Paper Award.
4. Alexandre Duret-Lutz, Thierry Géraud, and Akim Demaille. Generic design patterns in C++. In *Proceedings of the 6th USENIX Conference on Object-Oriented Technologies and Systems (COOTS)*, pages 189–202, San Antonio, TX, USA, January-February 2001. USENIX Association.

5. Thierry Géraud, Yoann Fabre, and Alexandre Duret-Lutz. Applying generic programming to image processing. In M.H. Hamsa, editor, *Proceedings of the IASTED International Conference on Applied Informatics (AI)—Symposium on Advances in Computer Applications*, pages 577–581, Innsbruck, Austria, February 2001. ACTA Press.
6. Thierry Géraud, Pierre-Yves Strub, and Jérôme Darbon. Color image segmentation based on automatic morphological clustering. In *Proceedings of the IEEE International Conference on Image Processing (ICIP)*, volume 3, pages 70–73, Thessaloniki, Greece, October 2001.
7. Thierry Géraud, Pierre-Yves Strub, and Jérôme Darbon. Segmentation d’images en couleur par classification morphologique non supervisée. In *Proceedings of the International Conference on Image and Signal Processing (ICISP)*, pages 387–394, Agadir, Morocco, May 2001. Faculty of Sciences at Ibn Zohr University, Morocco. In French.
8. Didier Verna. Virtual reality and tele-operation: a common framework. In *Proceedings of the 5th World Multi-Conference on Systemics, Cybernetics and Informatics (SCI)—Emergent Computing and Virtual Engineering*, volume 3, pages 499–504, Orlando, Florida, USA, July 2001.

1.25 Année 2000

1.25.1 Conférences Internationales

1. Alexandre Duret-Lutz. Olena: a component-based platform for image processing, mixing generic, generative and OO programming. In *Proceedings of the 2nd International Symposium on Generative and Component-Based Software Engineering (GCSE)—Young Researchers Workshop; published in “Net.ObjectDays2000”*, pages 653–659, Erfurt, Germany, October 2000.
2. Yoann Fabre, Guillaume Pitel, Laurent Soubrevilla, Emmanuel Marchand, Thierry Géraud, and Akim Demaille. An asynchronous architecture to manage communication, display, and user interaction in distributed virtual environments. In J.D. Mulder and R. van Liere, editors, *Virtual Environments 2000, Proceedings of the 6th Eurographics Workshop on Virtual Environments (EGVE)*, Computer Science / Eurographics Series, pages 105–113, Amsterdam, The Netherlands, June 2000. Springer-Verlag WienNewYork.
3. Yoann Fabre, Guillaume Pitel, and Didier Verna. Urbi et Orbi: unusual design and implementation choices for distributed virtual environments. In *Proceedings of the 6th International Conference on Virtual Systems and MultiMedia (VSMM)—Intelligent Environments Workshop*, pages 714–724, Gifu, Japan, October 2000. IOS Press, USA.
4. Yoann Fabre, Guillaume Pitel, Laurent Soubrevilla, Emmanuel Marchand, Thierry Géraud, and Akim Demaille. A framework to dynamically manage distributed virtual environments. In J.-C. Heudin, editor, *Proceedings of the 2nd International Conference on Virtual Worlds (VW)*, volume LNAI 1834 of *Lecture Notes in Computer Science Series*, pages 54–64, Paris, France, July 2000. Springer Verlag.
5. Thierry Géraud and Alexandre Duret-Lutz. Generic programming redesign of patterns. In *Proceedings of the 5th European Conference on Pattern Languages of Programs (EuroPLoP)*, pages 283–294, Irsee, Germany, July 2000. UVK, Univ. Verlag, Konstanz.
6. Thierry Géraud, Yoann Fabre, Alexandre Duret-Lutz, Dimitri Papadopoulos-Orfanos, and Jean-François Mangin. Obtaining genericity for image processing and pattern recognition algorithms. In *Proceedings of the 15th International Conference on Pattern Recognition (ICPR)*, volume 4, pages 816–819, Barcelona, Spain, September 2000. IEEE Computer Society.
7. Didier Verna. Action recognition: how intelligent virtual environments can ease human-machine interaction. In *Proceedings of the 6th International Conference on Virtual Systems and MultiMedia (VSMM)—Intelligent Environments Workshop*, pages 703–713, Gifu, Japan, October 2000. IOS Press, USA.

1.25.2 Conférences Nationales

1. Thierry Géraud, Isabelle Bloch, and Henri Maître. Reconnaissance de structures cérébrales à l'aide d'un atlas et par fusion d'informations structurelles floues. In *Actes du 12ème Congrès Francophone AFRIF-AFIA de Reconnaissance des Formes et Intelligence Artificielle (RFIA)*, volume 1, pages 287–295, Paris, France, February 2000. EPITA as current address.

1.26 Année 1999

1.26.1 Conférences Internationales

1. Thierry Géraud, Isabelle Bloch, and Henri Maître. Atlas-guided recognition of cerebral structures in MRI using fusion of fuzzy structural information. In *Proceeding of CIMAF Symposium on Artificial Intelligence*, pages 99–106, La Havana, Cuba, 1999. EPITA as current address.

1.26.2 Conférences Nationales

1. Thierry Géraud, Yoann Fabre, Dimitri Papadopoulos-Orfanos, and Jean-François Mangin. Vers une réutilisabilité totale des algorithmes de traitement d'images. In *Proceedings of the 17th Symposium on Signal and Image Processing (GRETSI)*, volume 2, pages 331–334, Vannes, France, September 1999. In French.

1.26.3 Rapports de Recherche

1. Régis Clouard, Abderrahim Elmoataz, François Angot, Olivier Lezoray, and Alexandre Duret-Lutz. Une bibliothèque et un environnement de programmation d'opérateurs de traitement d'images. Technical Report 99008, GREYC-ISMRA, Caen, France, November 1999. URL: <http://www.greyc.ismra.fr/~regis/Pandore/>.

2 Publications classées par projet

3 Publications classées par clé

1. Nathalie Abadie, Edwin Carlinet, Joseph Chazalon, and Bertrand Duménieu. A benchmark of named entity recognition approaches in historical documents. In *Proceedings of the 15th IAPR International Workshop on Document Analysis System*, volume 13237 of *Lecture Notes in Computer Science*, pages 445–460, La Rochelle, France, 5 2022. Springer. doi: [10.1007/978-3-031-06555-2_30](https://doi.org/10.1007/978-3-031-06555-2_30).
2. Alessandro Abate, Uli Fahrenberg, and Martin Fränzle. Introduction to the special issue on distributed hybrid systems. *Leibniz Transactions on Embedded Systems*, 8(2):00:1–00:3, December 2022. doi: [10.4230/LITES.8.2.0](https://doi.org/10.4230/LITES.8.2.0).
3. S. Akshay, Hugo Bazille, Blaise Genest, and Mihir Vahanwala. On robustness for the Skolem and positivity problems. In Petra Berenbrink and Benjamin Monmege, editors, *39th International Symposium on Theoretical Aspects of Computer Science STACS*, volume 219 of *LIPICs*, pages 5:1–5:20. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, March 2022. doi: [10.4230/LIPICs.STACS.2022.5](https://doi.org/10.4230/LIPICs.STACS.2022.5).
4. Alexis Angelidis and Geoffroy Fouquier. Visualization issues in virtual environments: from computer graphics techniques to intentional visualization. In V. Skala, editor, *Proceedings of the 9th International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG)*, volume 3, pages 90–98, Plzen, Czech Republic, February 2001.

5. Michael Atlan, Julie Rivet, Antoine Taliercio, Nicolas Boutry, Guillaume Tochon, and Jean-Pierre Huignard. Experimental digital gabor hologram rendering of *C. elegans* worms by a model-trained convolutional neural network (conference presentation). In *Label-free Biomedical Imaging and Sensing (LBIS) 2020*, volume 11251. International Society for Optics and Photonics, 2020. doi:10.1117/12.2545514.
6. Loïca Avanthey and Laurent Beaudoin. How to boost close-range remote sensing courses using a serious game: Uncover in a fun way the complexity and transversality of multi-domain field acquisitions. *Remote Sensing*, 14(4), 2022. URL: <https://www.mdpi.com/2072-4292/14/4/817>, doi:10.3390/rs14040817.
7. Souheib Baarir and Alexandre Duret-Lutz. Mechanizing the minimization of deterministic generalized Büchi automata. In *Proceedings of the 34th IFIP International Conference on Formal Techniques for Distributed Objects, Components and Systems (FORTE'14)*, volume 8461 of *Lecture Notes in Computer Science*, pages 266–283. Springer, June 2014. doi:10.1007/978-3-662-43613-4_17.
8. Souheib Baarir and Alexandre Duret-Lutz. SAT-based minimization of deterministic ω -automata. In *Proceedings of the 20th International Conference on Logic for Programming, Artificial Intelligence, and Reasoning (LPAR'15)*, volume 9450 of *Lecture Notes in Computer Science*, pages 79–87. Springer, November 2015. doi:10.1007/978-3-662-48899-7_6.
9. Tomáš Babiak, Thomas Badie, Alexandre Duret-Lutz, Mojmír Křetínský, and Jan Strejček. Compositional approach to suspension and other improvements to LTL translation. In *Proceedings of the 20th International SPIN Symposium on Model Checking of Software (SPIN'13)*, volume 7976 of *Lecture Notes in Computer Science*, pages 81–98. Springer, July 2013. doi:10.1007/978-3-642-39176-7_6.
10. Tomáš Babiak, František Blahoudek, Alexandre Duret-Lutz, Joachim Klein, Jan Křetínský, David Müller, David Parker, and Jan Strejček. The Hanoi Omega-Automata format. In *Proceedings of the 27th International Conference on Computer Aided Verification (CAV'15)*, volume 9206 of *Lecture Notes in Computer Science*, pages 479–486. Springer, July 2015. doi:10.1007/978-3-319-21690-4_31.
11. Christel Baier, František Blahoudek, Alexandre Duret-Lutz, Joachim Klein, David Müller, and Jan Strejček. Generic emptiness check for fun and profit. In *Proceedings of the 17th International Symposium on Automated Technology for Verification and Analysis (ATVA'19)*, volume 11781 of *Lecture Notes in Computer Science*, pages 445–461. Springer, October 2019. doi:10.1007/978-3-030-31784-3_26.
12. Anthony Baillard, Emmanuel Bertin, Yannic Mellier, Henry Joy McCracken, Thierry Géraud, Roser Pelló, Jean-François LeBorgne, and Pascal Fouqué. Project EFIGI: Automatic classification of galaxies. In Carlos Gabriel, Christophe Arviset, Daniel Ponz, and Enrique Solano, editors, *Astronomical Data Analysis Software and Systems XV*, volume 351 of *Conference*, pages 236–239. Astronomical Society of the Pacific, 2005. URL: http://www.aspbooks.org/custom/publications/paper/index.phtml?paper_id=3398.
13. Anthony Baillard, Christophe Berger, Emmanuel Bertin, Thierry Géraud, Roland Levillain, and Nicolas Widynski. Algorithme de calcul de l'arbre des composantes avec applications à la reconnaissance des formes en imagerie satellitaire. In *Proceedings of the 21st Symposium on Signal and Image Processing (GRETSI)*, Troyes, France, September 2007.
14. Jiri Barnat, Vincent Bloemen, Alexandre Duret-Lutz, Alfons Laarman, Laure Petrucci, Jaco van de Pol, and Etienne Renault. Parallel model checking algorithms for linear-time temporal logic. In Youssef Hamadi and Lakhdar Sais, editors, *Handbook of Parallel Constraint Reasoning*, chapter 12, pages 457–507. Springer International Publishing, Cham, 2018. doi:10.1007/978-3-319-63516-3_12.
15. Laurent Beaudoin and Loïca Avanthey. How to help digital-native students to successfully take control of their learning : A return of 8 years of experience on a computer science

- e-learning platform in higher education. *Education and Information Technologies (EIT) [Springer Nature]*, -(-):1–21, 2022. doi:10.1007/s10639-022-11407-8.
16. Laurent Beaudoin, Loïca Avanthey, Corentin Bunel, and Charles Villard. Automatically Guided Selection of a Set of Underwater Calibration Images. *Journal of Marine Science and Engineering (JMSE) [MDPI]*, 10(6):1–15, 2022. doi:10.3390/jmse10060741.
 17. Ala Eddine Ben Salem, Alexandre Duret-Lutz, and Fabrice Kordon. Generalized Büchi automata versus testing automata for model checking. In *Proceedings of the second International Workshop on Scalable and Usable Model Checking for Petri Net and other models of Concurrency (SUMO'11)*, volume 726 of *Workshop Proceedings*, Newcastle, UK, June 2011. CEUR. URL: <http://ftp.informatik.rwth-aachen.de/Publications/CEUR-WS/Vol-726/>.
 18. Ala Eddine Ben Salem, Alexandre Duret-Lutz, and Fabrice Kordon. Model checking using generalized testing automata. *Transactions on Petri Nets and Other Models of Concurrency (ToPNoC VI)*, 7400:94–112, 2012. doi:10.1007/978-3-642-35179-2_5.
 19. Ala Eddine Ben Salem. *Improving the Model Checking of Stutter-Invariant LTL Properties*. PhD thesis, Université Pierre et Marie Curie - Paris VI, Paris, France, September 2014.
 20. Ala Eddine Ben Salem, Alexandre Duret-Lutz, Fabrice Kordon, and Yann Thierry-Mieg. Symbolic model checking of stutter invariant properties using generalized testing automata. In *Proceedings of the 20th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS'14)*, volume 8413 of *Lecture Notes in Computer Science*, pages 440–454, Grenoble, France, April 2014. Springer. doi:10.1007/978-3-642-54862-8_38.
 21. Ala Eddine Ben Salem and Mohamed Graiet. Combining explicit and symbolic LTL model checking using generalized testing automata. In *Proceedings of the 15th International Conference on Application of Concurrency to System Design (ACSD'15)*, Brussels, Belgium, June 2015. IEEE Computer Society.
 22. Ala Eddine Ben Salem. Extending testing automata to all LTL. In *Proceedings of the 35th IFIP International Conference on Formal Techniques for Distributed Objects, Components and Systems (FORTE'15)*, volume 9039 of *Lecture Notes in Computer Science*, Grenoble, France, June 2015. Springer.
 23. Ala Eddine Ben Salem. Single-pass testing automata for LTL model checking. In *Proceedings of the 9th International Conference on Language and Automata Theory and Applications (LATA'15)*, volume 8977 of *Lecture Notes in Computer Science*, pages 563–576, Nice, France, March 2015. Springer.
 24. Christophe Berger, Thierry Géraud, Roland Levillain, Nicolas Widynski, Anthony Baillard, and Emmanuel Bertin. Effective component tree computation with application to pattern recognition in astronomical imaging. In *Proceedings of the IEEE International Conference on Image Processing (ICIP)*, volume 4, pages 41–44, San Antonio, TX, USA, September 2007.
 25. František Blahoudek, Alexandre Duret-Lutz, Mojmír Křetínský, and Jan Strejček. Is there a best Büchi automaton for explicit model checking? In *Proceedings of the 21th International SPIN Symposium on Model Checking of Software (SPIN'14)*, pages 68–76. ACM, 2014. doi:10.1145/2632362.2632377.
 26. František Blahoudek, Alexandre Duret-Lutz, Vojtěch Rujbr, and Jan Strejček. On refinement of Büchi automata for explicit model checking. In *Proceedings of the 22th International SPIN Symposium on Model Checking of Software (SPIN'15)*, volume 9232 of *Lecture Notes in Computer Science*, pages 66–83. Springer, August 2015. doi:10.1007/978-3-319-23404-5_6.
 27. František Blahoudek, Alexandre Duret-Lutz, Mikuláš Klokočka, Mojmír Křetínský, and Jan Strejček. Seminor: A tool for semi-determinization of omega-automata. In Thomas Eiter, David Sands, and Geoff Sutcliffe, editors, *Proceedings of the 21th International Conference*

- on *Logic for Programming, Artificial Intelligence, and Reasoning (LPAR-21)*, volume 46 of *EPiC Series in Computing*, pages 356–367. EasyChair Publications, May 2017. doi:[10.29007/k5n1](https://doi.org/10.29007/k5n1).
28. František Blahoudek, Alexandre Duret-Lutz, and Jan Strejček. Seminators 2 can complement generalized Büchi automata via improved semi-determinization. In *Proceedings of the 32nd International Conference on Computer-Aided Verification (CAV'20)*, volume 12225 of *Lecture Notes in Computer Science*, pages 15–27. Springer, July 2020. doi:[10.1007/978-3-030-53291-8_2](https://doi.org/10.1007/978-3-030-53291-8_2).
 29. Nicolas Blin, Edwin Carlinet, Florian Lemaitre, Lionel Lacassagne, and Thierry Géraud. Max-tree computation on GPUs. *IEEE Transactions on Parallel and Distributed Systems*, 33(12):3520–3531, March 2022. doi:[10.1109/TPDS.2022.3158488](https://doi.org/10.1109/TPDS.2022.3158488).
 30. Isabelle Bloch, Thierry Géraud, and Henri Maître. Representation and fusion of heterogeneous fuzzy information in the 3D space for model-based structural recognition—application to 3D brain imaging. *Artificial Intelligence*, 148(1-2):141–175, August 2003. doi:[10.1016/S0004-3702\(03\)00018-3](https://doi.org/10.1016/S0004-3702(03)00018-3).
 31. Isabelle Bloch, Olivier Colliot, Oscar Camara, and Thierry Géraud. Fusion of spatial relationships for guiding recognition, example of brain structure recognition in 3D MRI. *Pattern Recognition Letters*, 26(4):449–457, March 2005. doi:[10.1016/j.patrec.2004.08.009](https://doi.org/10.1016/j.patrec.2004.08.009).
 32. Isabelle Bloch, Samy Blusseau, Ramón Pino Pérez, Élodie Puybareau, and Guillaume Tochon. On some associations between mathematical morphology and artificial intelligence. In Joakim Lindblad, Filip Malmberg, and Nataša Sladoje, editors, *Proceedings of the IAPR International Conference on Discrete Geometry and Mathematical Morphology (DGMM)*, volume 12708 of *Lecture Notes in Computer Science*, pages 457–469, Uppsala, Sweden, May 2021. Springer. doi:[10.1007/978-3-030-76657-3_33](https://doi.org/10.1007/978-3-030-76657-3_33).
 33. Vincent Bloemen, Alexandre Duret-Lutz, and Jaco van de Pol. Explicit state model checking with generalized büchi and rabin automata. In *Proceedings of the 24th International SPIN Symposium on Model Checking of Software (SPIN'17)*, pages 50–59. ACM, July 2017. doi:[10.1145/3092282.3092288](https://doi.org/10.1145/3092282.3092288).
 34. Vincent Bloemen, Alexandre Duret-Lutz, and Jaco van de Pol. Model checking with generalized Rabin and Fin-less automata. *International Journal on Software Tools for Technology Transfer*, 21(3):307–324, June 2019. doi:[10.1007/s10009-019-00508-4](https://doi.org/10.1007/s10009-019-00508-4).
 35. Sylvie Boldo, Florian Faissole, and Vincent Tourneur. A formally-proved algorithm to compute the correct average of decimal floating-point numbers. In *25th IEEE Symposium on Computer Arithmetic*, Amherst, MA, United States, June 2018.
 36. Alexandre Borghi, Valentin David, and Akim Demaille. C-Transformers — A framework to write C program transformations. *ACM Crossroads*, 12(3), Spring 2006. <http://www.acm.org/crossroads/xrds12-3/contractc.html>.
 37. Jonas Borgstrom, William Campbell, Najim Dehak, Réda Dehak, Daniel Garcia-Romero, Kara Greenfield and Alan McCree, Doug Reynold, Fred Richardson, Elliot Singery, Douglas Sturim, and Pedro A. Torres-Carrasquillo. MITLL 2012 speaker recognition evaluation system description. In *NIST Speaker Recognition Evaluation*, Orlando, December 2012.
 38. Nassim Bouarour, Idir Benouaret, and Sihem Amer-Yahia. Learning diversity attributes in multi-session recommendations. In *2022 IEEE International Conference on Big Data (Big Data)*, pages 1–10, Osaka, Japan, December 2022. IEEE. accepted. doi:[10.1109/BigDataXXXX](https://doi.org/10.1109/BigDataXXXX).
 39. Nicolas Boutry, Thierry Géraud, and Laurent Najman. On making n D images well-composed by a self-dual local interpolation. In E. Barucci, A. Frosini, and S. Rinaldi, editors, *Proceedings of the 18th International Conference on Discrete Geometry for Computer Imagery (DGCI)*, volume 8668 of *Lecture Notes in Computer Science*, pages 320–331, Siena, Italy, September 2014. Springer. doi:[10.1007/978-3-319-09955-2_27](https://doi.org/10.1007/978-3-319-09955-2_27).

40. Nicolas Boutry, Thierry Géraud, and Laurent Najman. Une généralisation du *bien-composé* à la dimension n . Communication at Journée du Groupe de Travail de Géométrie Discrète (GT GeoDis, Reims Image 2014), November 2014. In French.
41. Nicolas Boutry, Thierry Géraud, and Laurent Najman. How to make n D images well-composed without interpolation. In *Proceedings of the IEEE International Conference on Image Processing (ICIP)*, pages 2149–2153, Québec City, Canada, September 2015. doi:[10.1109/ICIP.2015.7351181](https://doi.org/10.1109/ICIP.2015.7351181).
42. Nicolas Boutry, Thierry Géraud, and Laurent Najman. How to make n D functions digitally well-composed in a self-dual way. In J.A. Benediktsson, J. Chanussot, L. Najman, and H. Talbot, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 12th International Symposium on Mathematical Morphology (ISMM)*, volume 9082 of *Lecture Notes in Computer Science Series*, pages 561–572, Reykjavik, Iceland, 2015. Springer. doi:[10.1007/978-3-319-18720-4_47](https://doi.org/10.1007/978-3-319-18720-4_47).
43. Nicolas Boutry. *A Study of Well-Composedness in n -D*. PhD thesis, Université Paris-Est, Noisy-Le-Grand, France, December 2016.
44. Nicolas Boutry, Laurent Najman, and Thierry Géraud. Well-composedness in Alexandrov spaces implies digital well-composedness in z^n . In W.G. Kropatsch, N.M. Artner, and I. Janusch, editors, *Discrete Geometry for Computer Imagery – Proceedings of the 20th IAPR International Conference on Discrete Geometry for Computer Imagery (DGCI)*, volume 10502 of *Lecture Notes in Computer Science*, pages 225–237, Vienna, Austria, September 2017. Springer. doi:[10.1007/978-3-319-66272-5_19](https://doi.org/10.1007/978-3-319-66272-5_19).
45. Nicolas Boutry, Thierry Géraud, and Laurent Najman. A tutorial on well-composedness. *Journal of Mathematical Imaging and Vision*, 60(3):443–478, March 2018. doi:[10.1007/s10851-017-0769-6](https://doi.org/10.1007/s10851-017-0769-6).
46. Nicolas Boutry, Rocio Gonzalez-Diaz, and Maria-Jose Jimenez. Weakly well-composed cell complexes over n D pictures. *Information Sciences*, 499:62–83, October 2019. doi:[10.1016/j.ins.2018.06.005](https://doi.org/10.1016/j.ins.2018.06.005).
47. Nicolas Boutry, Rocio Gonzalez-Diaz, and Maria-Jose Jimenez. One more step towards well-composedness of cell complexes over n -D pictures. In Michel Couprie, Jean Cousty, Yukiko Kenmochi, and Nabil Mustafa, editors, *Proceedings of the 21st International Conference on Discrete Geometry for Computer Imagery (DGCI)*, volume 11414 of *Lecture Notes in Computer Science*, pages 101–114, Marne-la-Vallée, France, March 2019. Springer. doi:doi.org/10.1007/978-3-030-14085-4_9.
48. Nicolas Boutry, Thierry Géraud, and Laurent Najman. An equivalence relation between morphological dynamics and persistent homology in 1D. In *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 14th International Symposium on Mathematical Morphology (ISMM)*, volume 12708 of *Lecture Notes in Computer Science Series*, pages 1–12, Saarbrücken, Germany, July 2019. Springer. doi:[10.1007/978-3-030-20867-7_5](https://doi.org/10.1007/978-3-030-20867-7_5).
49. Nicolas Boutry, Thierry Géraud, and Laurent Najman. How to make n -D plain maps Alexandrov-well-composed in a self-dual way. *Journal of Mathematical Imaging and Vision*, 61(6):849–873, July 2019. doi:[10.1007/s10851-019-00873-4](https://doi.org/10.1007/s10851-019-00873-4).
50. Nicolas Boutry, Joseph Chazalon, Élodie Puybareau, Guillaume Tochon, Hugues Talbot, and Thierry Géraud. Using separated inputs for multimodal brain tumor segmentation with 3D U-Net-like architectures. In A. Crimi and S. Bakas, editors, *Proceedings of the 4th International Workshop, BrainLes 2019, Held in Conjunction with MICCAI 2019*, volume 11992 of *Lecture Notes in Computer Science*, pages 187–199. Springer, 2019. doi:[10.1007/978-3-030-46640-4_18](https://doi.org/10.1007/978-3-030-46640-4_18).
51. Nicolas Boutry, Rocio Gonzalez-Diaz, Maria-Jose Jimenez, and Eduardo Paluzo-Hildago. Euler well-composedness. In T. Lukic, R. P. Barneva, V. Brimkov, L. Comic, and N. Sladoje, editors, *Combinatorial Image Analysis: Proceedings of the 20th International Workshop*,

- IWCIA 2020, Novi Sad, Serbia, July 16–18, 2020*, volume 12148 of *Lecture Notes in Computer Science*, pages 3–19. Springer, 2020. doi:10.1007/978-3-030-51002-2_1.
52. Nicolas Boutry, Rocio Gonzalez-Diaz, Laurent Najman, and Thierry Géraud. A 4D counter-example showing that DWcness does not imply CWCness in n -D. In T. Lukic, R. P. Barneva, V. Brimkov, L. Comic, and N. Sladoje, editors, *Combinatorial Image Analysis: Proceedings of the 20th International Workshop, IWCIA 2020, Novi Sad, Serbia, July 16–18, 2020*, volume 12148 of *Lecture Notes in Computer Science*, pages 73–87. Springer, 2020. doi:10.1007/978-3-030-51002-2_6.
 53. Nicolas Boutry, Laurent Najman, and Thierry Géraud. Topological properties of the first non-local digitally well-composed interpolation on n -D cubical grids. *Journal of Mathematical Imaging and Vision*, 62:1256–1284, September 2020. doi:10.1007/s10851-020-00989-y.
 54. Nicolas Boutry, Laurent Najman, and Thierry Géraud. Equivalence between digital well-composedness and well-composedness in the sense of Alexandrov on n -D cubical grids. *Journal of Mathematical Imaging and Vision*, 62:1285–1333, September 2020. doi:10.1007/s10851-020-00988-z.
 55. Nicolas Boutry, Thierry Géraud, and Laurent Najman. An equivalence relation between morphological dynamics and persistent homology in n -D. In *Proceedings of the IAPR International Conference on Discrete Geometry and Mathematical Morphology (DGMM)*, volume 12708 of *Lecture Notes in Computer Science*, pages 525–537, Uppsala, Sweden, May 2021. Springer. doi:10.1007/978-3-030-76657-3_38.
 56. Nicolas Boutry and Thierry Géraud. A new matching algorithm between trees of shapes and its application to brain tumor segmentation. In *Proceedings of the IAPR International Conference on Discrete Geometry and Mathematical Morphology (DGMM)*, volume 12708 of *Lecture Notes in Computer Science*, pages 67–78, Uppsala, Sweden, May 2021. Springer. doi:10.1007/978-3-030-76657-3_4.
 57. Nicolas Boutry and Guillaume Tochon. Stability of the tree of shapes to additive noise. In *Proceedings of the IAPR International Conference on Discrete Geometry and Mathematical Morphology (DGMM)*, volume 12708 of *Lecture Notes in Computer Science*, pages 365–377, Uppsala, Sweden, May 2021. Springer. doi:10.1007/978-3-030-76657-3_26.
 58. Nicolas Boutry, Rocio Gonzalez-Diaz, Laurent Najman, and Thierry Géraud. Continuous well-composedness implies digital well-composedness in n -D. *Journal of Mathematical Imaging and Vision*, 64(2):131–150, January 2022. doi:10.1007/s10851-021-01058-8.
 59. Nicolas Boutry, Rocio Gonzalez-Diaz, Maria-Jose Jimenez, and Eduardo Paluzo-Hildago. Strong Euler well-composedness. *Journal of Combinatorial Optimization*, 12148:3038–3055, November 2021. doi:10.1007/s10878-021-00837-8.
 60. Sharib Ali, Mariia Dmitrieva, Noha Ghatwary, Sophia Bano, Gorkem Polat, Alptekin Temizel, Adrian Krenzer, Amar Hekalo, Yun Bo Guo, Bogdan Matuszewski, Mourad Gridach, Irina Voiculescu, Vishnusai Yoganand, Arnav Chavan, Aryan Raj, Nhan T. Nguyen, Dat Q. Tran, Le Duy Huynh, Nicolas Boutry, Shahadate Rezvy, Haijian Chen, Yoon Ho Choi, Anand Subramanian, Velmurugan Balasubramanian, Xiaohong W. Gao, Hongyu Hu, Yusheng Liao, Danail Stoyanov, Christian Daul, Stefano Realdon, Renato Cannizzaro, Dominique Lamarque, Terry Tran-Nguyen, Adam Bailey, Barbara Braden, James East, and Jens Rittscher. Deep learning for detection and segmentation of artefact and disease instances in gastrointestinal endoscopy. *Medical Image Analysis*, 70(102002), May 2021. doi:10.1016/j.media.2021.102002.
 61. Marc Demoustier, Ines Khemir, Quoc Duon Nguyen, Lucien Martin-Gaffé, and Nicolas Boutry. Residual 3D U-net with localization for brain tumor segmentation. In *International MICCAI Brainlesion Workshop*, volume 12962 of *Lecture Notes in Computer Science*, pages 389–399. Springer, 2022. doi:10.1007/978-3-031-08999-2_33.
 62. Nicolas Boutry, Gilles Bertrand, and Laurent Najman. Gradient vector fields of discrete morse functions and watershed-cuts. In *Proceedings of the IAPR International Conference*

- on *Discrete Geometry and Mathematical Morphology (DGMM)*, Lecture Notes in Computer Science, 2022.
63. Nicolas Boutry, Laurent Najman, and Thierry Géraud. Some equivalence relation between persistent homology and morphological dynamics. *Journal of Mathematical Imaging and Vision*, 64:807–824, September 2022. doi:[10.1007/s10851-022-01104-z](https://doi.org/10.1007/s10851-022-01104-z).
 64. Philippe Bouchet, Jean-Baptiste Deloges, Hugo Canton-Bacara, Gaëtan Pusel, Lucas Pinot, Othman Elbaz, and Nicolas Boutry. An Efficient Cascade of U-Net-like Convolutional Neural Networks devoted to Brain Tumor Segmentation. In *International MICCAI Brainlesion Workshop*, Lecture Notes in Computer Science. Springer.
 65. Thibault Buatois, Élodie Puybareau, Guillaume Tochon, and Joseph Chazalon. Two stages CNN-based segmentation of gliomas, uncertainty quantification and prediction of overall patient survival. In A. Crimi and S. Bakas, editors, *International MICCAI Brainlesion Workshop*, volume 11992 of *Lecture Notes in Computer Science*, pages 167–178. Springer, 2019. doi:[10.1007/978-3-030-46643-5_16](https://doi.org/10.1007/978-3-030-46643-5_16).
 66. Nicolas Burrus, Alexandre Duret-Lutz, Thierry Géraud, David Lesage, and Raphaël Poss. A static C++ object-oriented programming (SCOOP) paradigm mixing benefits of traditional OOP and generic programming. In *Proceedings of the Workshop on Multiple Paradigm with Object-Oriented Languages (MPOOL)*, Anaheim, CA, USA, October 2003.
 67. Michaël Cadilhac, Thomas Héroult, Richard Lassaigne, Sylvain Peyronnet, and Sébastien Tixeuil. Evaluating complex MAC protocols for sensor networks with APMC. In *Proceedings of the 6th International Workshop on Automated Verification of Critical Systems (AVoCS)*, volume 185 of *Electronic Notes in Theoretical Computer Science Series*, pages 33–46, 2006.
 68. Stefania Calarasanu, Jonathan Fabrizio, and Séverine Dubuisson. Using histogram representation and earth mover’s distance as an evaluation tool for text detection. In *Proceedings of the 13th IAPR International Conference on Document Analysis and Recognition (ICDAR)*, pages 221–225, Nancy, France, August 2015. doi:[10.1109/ICDAR.2015.7333756](https://doi.org/10.1109/ICDAR.2015.7333756).
 69. Stefania Calarasanu. *Improvement of a text detection chain and the proposition of a new evaluation protocol for text detection algorithms*. PhD thesis, Université Pierre et Marie Curie - Paris 6, Paris, France, December 2015.
 70. Stefania Calarasanu, Jonathan Fabrizio, and Séverine Dubuisson. What is a good evaluation protocol for text localization systems? concerns, arguments, comparisons and solutions. *Image and Vision Computing*, 46:1–17, February 2016. doi:[10.1016/j.imavis.2015.12.001](https://doi.org/10.1016/j.imavis.2015.12.001).
 71. Stefania Calarasanu, Jonathan Fabrizio, and Séverine Dubuisson. From text detection to text segmentation: a unified evaluation scheme. In *Proceedings of the 2nd International Workshop on Robust Reading Conference (IWRR-ECCV)*, Amsterdam, The Netherlands, October 2016.
 72. Stefania Calarasanu, Séverine Dubuisson, and Jonathan Fabrizio. Towards the rectification of highly distorted texts. In *Proceedings of the 11th International Conference on Computer Vision Theory and Applications (VISAPP)*, Rome, Italie, February 2016. doi:[10.5220/0005772602410248](https://doi.org/10.5220/0005772602410248).
 73. Sébastien Carlier. Polar type inference with intersection types and ω . In *Proceedings of the 2nd Workshop on Intersection Types and Related Systems (ITRS)*, published in: *Electronic Notes in Theoretical Computer Science*, volume 70, Copenhagen, Denmark, July 2002. Elsevier.
 74. Edwin Carlinet and Thierry Géraud. A comparison of many max-tree computation algorithms. In C.L. Luengo Hendriks, G. Borgefors, and R. Strand, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 11th International Symposium on Mathematical Morphology (ISMM)*, volume 7883 of *Lecture Notes in Computer Science Series*, pages 73–85, Uppsala, Sweden, 2013. Springer.

75. Edwin Carlinet and Thierry Géraud. Traitement d'images multivariées avec l'arbre des formes. Communication at Journée du Groupe de Travail de Géométrie Discrète (GT GeoDis, Reims Image 2014), November 2014. In French.
76. Edwin Carlinet and Thierry Géraud. Getting a morphological tree of shapes for multivariate images: Paths, traps and pitfalls. In *Proceedings of the 21st International Conference on Image Processing (ICIP)*, pages 615–619, Paris, France, 2014. doi:[10.1109/ICIP.2014.7025123](https://doi.org/10.1109/ICIP.2014.7025123).
77. Edwin Carlinet and Thierry Géraud. A morphological tree of shapes for color images. In *Proceedings of the 22nd International Conference on Pattern Recognition (ICPR)*, pages 1133–1137, Stockholm, Sweden, August 2014. doi:[10.1109/ICPR.2014.204](https://doi.org/10.1109/ICPR.2014.204).
78. Edwin Carlinet and Thierry Géraud. A comparative review of component tree computation algorithms. *IEEE Transactions on Image Processing*, 23(9):3885–3895, September 2014. URL: [10.1109/TIP.2014.2336551](https://doi.org/10.1109/TIP.2014.2336551).
79. Edwin Carlinet and Thierry Géraud. Une approche morphologique de segmentation interactive avec l'arbre des formes couleur. In *Actes du 15e Colloque GRETSI*, Lyon, France, September 2015.
80. Edwin Carlinet and Thierry Géraud. Morphological object picking based on the color tree of shapes. In *Proceedings of 5th International Conference on Image Processing Theory, Tools and Applications (IPTA'15)*, pages 125–130, Orléans, France, November 2015. doi:[10.1109/IPTA.2015.7367111](https://doi.org/10.1109/IPTA.2015.7367111).
81. Edwin Carlinet and Thierry Géraud. A color tree of shapes with illustrations on filtering, simplification, and segmentation. In J.A. Benediktsson, J. Chanussot, L. Najman, and H. Talbot, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 12th International Symposium on Mathematical Morphology (ISMM)*, volume 9082 of *Lecture Notes in Computer Science Series*, pages 363–374, Reykjavik, Iceland, 2015. Springer. doi:[10.1007/978-3-319-18720-4_31](https://doi.org/10.1007/978-3-319-18720-4_31).
82. Edwin Carlinet and Thierry Géraud. MToS: A tree of shapes for multivariate images. *IEEE Transactions on Image Processing*, 24(12):5330–5342, December 2015. URL: [10.1109/TIP.2015.2480599](https://doi.org/10.1109/TIP.2015.2480599).
83. Edwin Carlinet. *A Tree of Shapes for Multivariate Images*. PhD thesis, Université Paris Est, Paris, France, November 2015.
84. Edwin Carlinet, Yongchao Xu, Nicolas Boutry, and Thierry Géraud. La pseudo-distance du dahu. In *Actes d'ORASIS*, Colleville-sur-Mer, France, June 2017.
85. Edwin Carlinet, Thierry Géraud, and Sébastien Crozet. The tree of shapes turned into a max-tree: A simple and efficient linear algorithm. In *Proceedings of the 24th IEEE International Conference on Image Processing (ICIP)*, pages 1488–1492, Athens, Greece, October 2018. doi:[10.1109/ICIP.2018.8451180](https://doi.org/10.1109/ICIP.2018.8451180).
86. Edwin Carlinet, Sébastien Crozet, and Thierry Géraud. Un algorithme de complexité linéaire pour le calcul de l'arbre des formes. In *Actes du congrès Reconnaissance des Formes, Image, Apprentissage et Perception (RFIAP)*, Marne-la-Vallée, France, June 2018.
87. Edwin Carlinet and Thierry Géraud. Intervertebral disc segmentation using mathematical morphology—A CNN-free approach. In *Proceedings of the 5th MICCAI Workshop & Challenge on Computational Methods and Clinical Applications for Spine Imaging (CSI)*, volume 11384 of *Lecture Notes in Computer Science*, pages 105–118. Springer, 2019. doi:[10.1007/978-3-030-13736-6_9](https://doi.org/10.1007/978-3-030-13736-6_9).
88. Edwin Carlinet and Thierry Géraud. Filtres connexes multivariés par fusion d'arbres de composantes. In *Proceedings of the 27th Symposium on Signal and Image Processing (GRETSI)*, Lille, France, August 2019.
89. Edwin Carlinet and Thierry Géraud. Introducing multivariate connected openings and closings. In *Mathematical Morphology and Its Application to Signal and Image Processing*

- *Proceedings of the 14th International Symposium on Mathematical Morphology (ISMM)*, Lecture Notes in Computer Science Series, pages 1–12, Saarbrücken, Germany, July 2019. Springer. doi:[10.1007/978-3-030-20867-7_17](https://doi.org/10.1007/978-3-030-20867-7_17).
90. Antonio Casares, Alexandre Duret-Lutz, Klara J. Meyer, Florian Renkin, and Salomon Sickert. Practical applications of the Alternating Cycle Decomposition. In *Proceedings of the 28th International Conference on Tools and Algorithms for the Construction and Analysis of Systems*, volume 13244 of *Lecture Notes in Computer Science*, pages 99–117, April 2022. doi:[10.1007/978-3-030-99527-0_6](https://doi.org/10.1007/978-3-030-99527-0_6).
 91. Gabriele Cavallaro, Mauro Dalla Mura, Edwin Carlinet, Thierry Géraud, Nicola Falco, and Jón Atli Benediktsson. Region-based classification of remote sensing images with the morphological tree of shapes. In *Proceedings of the IEEE International Geoscience and Remote Sensing Symposium (IGARSS)*, pages 5087–5090, Beijing, China, July 2016. doi:[10.1109/IGARSS.2016.7730326](https://doi.org/10.1109/IGARSS.2016.7730326).
 92. J. Chazalon, P. Gomez-Krämer, J.-C. Burie, M. Coustaty, S. Eskenazi, M. Luqman, N. Nayef, M. Rusiñol, N. Sidère, and J.M. Ogier. SmartDoc 2017 video capture: Mobile document acquisition in video mode. In *Proceedings of the 1st International Workshop on Open Services and Tools for Document Analysis (ICDAR-OST)*, pages 11–16, Kyoto, Japan, November 2017. doi:[10.1109/ICDAR.2017.306](https://doi.org/10.1109/ICDAR.2017.306).
 93. Joseph Chazalon and Edwin Carlinet. Revisiting the Coco panoptic metric to enable visual and qualitative analysis of historical map instance segmentation. In *Proceedings of the 16th International Conference on Document Analysis and Recognition (ICDAR'21)*, volume 12824 of *Lecture Notes in Computer Science*, pages 367–382, Lausanne, Switzerland, September 2021. Springer, Cham. doi:[10.1007/978-3-030-86337-1_25](https://doi.org/10.1007/978-3-030-86337-1_25).
 94. Joseph Chazalon, Edwin Carlinet, Yizi Chen, Julien Perret, Bertrand Duménieu, Clément Mallet, Thierry Géraud, Vincent Nguyen, Nam Nguyen, Josef Baloun, Ladislav Lenc, and Pavel Král. ICDAR 2021 competition on historical map segmentation. In *Proceedings of the 16th International Conference on Document Analysis and Recognition (ICDAR'21)*, volume 12824 of *Lecture Notes in Computer Science*, pages 693–707, Lausanne, Switzerland, September 2021. Springer, Cham. doi:[10.1007/978-3-030-86337-1_46](https://doi.org/10.1007/978-3-030-86337-1_46).
 95. Christopher Chedeau and Didier Verna. JSPP: Morphing C++ into JavaScript. Technical Report 201201-TR, EPITA Research and Development Laboratory, January 2012.
 96. Mickael Chekroun, Jérôme Darbon, and Igor Ciril. On a polynomial vector field model for shape representation. In *Proceedings of the International Conference on Image Analysis and Recognition (ICIAR)*, Povoá de Varzim, Portugal, September 2006. Springer-Verlag.
 97. Yizi Chen, Edwin Carlinet, Joseph Chazalon, Clément Mallet, Bertrand Duménieu, and Julien Perret. Combining deep learning and mathematical morphology for historical map segmentation. In *Proceedings of the IAPR International Conference on Discrete Geometry and Mathematical Morphology (DGMM)*, volume 12708 of *Lecture Notes in Computer Science*, pages 79–92, Uppsala, Sweden, May 2021. Springer. Accepted. doi:[10.1007/978-3-030-76657-3_5](https://doi.org/10.1007/978-3-030-76657-3_5).
 98. Yizi Chen, Edwin Carlinet, Joseph Chazalon, Clément Mallet, Bertrand Duménieu, and Julien Perret. Vectorization of historical maps using deep edge filtering and closed shape extraction. In *Proceedings of the 16th International Conference on Document Analysis and Recognition (ICDAR'21)*, volume 12824 of *Lecture Notes in Computer Science*, pages 510–525, Lausanne, Switzerland, September 2021. Springer, Cham. doi:[10.1007/978-3-030-86337-1_34](https://doi.org/10.1007/978-3-030-86337-1_34).
 99. Yves Christian Elloh Adja, Badis Hammi, Ahmed Serhrouchni, and Sherali Zeadally. A blockchain-based certificate revocation management and status verification system. *Computers & Security*, 104:102209, 2021. URL: <https://www.sciencedirect.com/science/article/pii/S016740482100033X>, doi:<https://doi.org/10.1016/j.cose.2021.102209>.

100. Thomas Claveirole, Sylvain Lombardy, Sarah O'Connor, Louis-Noël Pouchet, and Jacques Sakarovitch. Inside Vaucanson. In Springer-Verlag, editor, *Proceedings of Implementation and Application of Automata, 10th International Conference (CIAA)*, volume 3845 of *Lecture Notes in Computer Science Series*, pages 117–128, Sophia Antipolis, France, June 2005.
101. Régis Clouard, Abderrahim Elmoataz, François Angot, Olivier Lezoray, and Alexandre Duret-Lutz. Une bibliothèque et un environnement de programmation d'opérateurs de traitement d'images. Technical Report 99008, GREYC-ISMRA, Caen, France, November 1999. URL: <http://www.greyc.ismra.fr/~regis/Pandore/>.
102. Sébastien Crozet and Thierry Géraud. A first parallel algorithm to compute the morphological tree of shapes of n D images. In *Proceedings of the 21st International Conference on Image Processing (ICIP)*, pages 2933–2937, Paris, France, 2014. doi:10.1109/ICIP.2014.7025593.
103. Aliona Dangla, Élodie Puybareau, Guillaume Tochon, and Jonathan Fabrizio. A first step toward a fair comparison of evaluation protocols for text detection algorithms. In *Proceedings of the IAPR International Workshop on Document Analysis Systems (DAS)*, Vienna, Austria, April 2018. doi:10.1109/DAS.2018.55.
104. Jérôme Darbon, Bulent Sankur, and Henri Maître. Error correcting code performance for watermark protection. In *Proceedings of the 13th Symposium SPIE on Electronic Imaging—Security and Watermarking of Multimedia Contents III (EI27)*, volume 4314, pages 663–672, San Jose, CA, USA, January 2001.
105. Jérôme Darbon, Thierry Géraud, and Alexandre Duret-Lutz. Generic implementation of morphological image operators. In *Mathematical Morphology, Proceedings of the 6th International Symposium (ISMM)*, pages 175–184, Sydney, Australia, April 2002. CSIRO Publishing.
106. Jérôme Darbon, Thierry Géraud, and Patrick Bellot. Generic algorithmic blocks dedicated to image processing. In *Proceedings of the ECOOP Workshop for PhD Students*, Oslo, Norway, June 2004.
107. Jérôme Darbon and Marc Sigelle. Exact optimization of discrete constrained total variation minimization problems. In *Proceedings of the 10th International Workshop on Combinatorial Image Analysis (IWCIA)*, volume 3322 of *Lecture Notes in Computer Science Series*, pages 548–557, Auckland, New Zealand, December 2004. Springer-Verlag.
108. Jérôme Darbon and Marc Sigelle. Exact optimization of discrete constrained total variation minimization problems. Technical Report 2004C004, ENST, Paris, France, October 2004.
109. Jérôme Darbon and Ceyhun Burak Akgül. An efficient algorithm for attribute openings and closings. In *Proceedings of the 13th European Signal Processing Conference (EUSIPCO)*, Antalya, Turkey, September 2005.
110. Jérôme Darbon and Marc Sigelle. A fast and exact algorithm for total variation minimization. In *Proceedings of the 2nd Iberian Conference on Pattern Recognition and Image Analysis (IbPRIA)*, volume 3522, pages 351–359, Estoril, Portugal, June 2005. Springer-Verlag.
111. Jérôme Darbon. Total variation minimization with l^1 data fidelity as a contrast invariant filter. In *Proceedings of the 4th International Symposium on Image and Signal Processing and Analysis (ISPA 2005)*, pages 221–226, Zagreb, Croatia, September 2005.
112. Jérôme Darbon and Sylvain Peyronnet. A vectorial self-dual morphological filter based on total variation minimization. In *Proceedings of the First International Conference on Visual Computing*, volume 3804 of *Lecture Notes in Computer Science Series*, pages 388–395, Lake Tahoe, Nevada, USA, December 2005. Springer-Verlag.
113. Jérôme Darbon. *Composants logiciels et algorithmes de minimisation exacte d'énergies dédiées au traitement d'images*. PhD thesis, École Nationale Supérieure des Télécommunications de Paris (ENST), Paris, France, October 2005. In French.

114. Jérôme Darbon and Marc Sigelle. A fast and exact algorithm for total variation minimization. Technical Report 2005D002, ENST, Paris, France, January 2005.
115. Jérôme Darbon, Richard Lassaigne, and Sylvain Peyronnet. Approximate probabilistic model checking for programs. In *Proceedings of the IEEE 2nd International Conference on Intelligent Computer Communication and Processing (ICCP'06)*, Technical University of Cluj-Napoca, Romania, September 2006.
116. Jérôme Darbon and Marc Sigelle. Image restoration with discrete constrained Total Variation—part I: Fast and exact optimization. *Journal of Mathematical Imaging and Vision*, 26(3):261–276, December 2006.
117. Jérôme Darbon and Marc Sigelle. Image restoration with discrete constrained Total Variation—part II: Levelable functions, convex priors and non-convex case. *Journal of Mathematical Imaging and Vision*, 26(3):277–291, December 2006.
118. Jérôme Darbon and Marc Sigelle. Fast and exact discrete image restoration based on total variation and on its extensions to levelable potentials. In *SIAM Conference on Imaging Sciences*, Minneapolis, USA, May 2006.
119. Jérôme Darbon, Marc Sigelle, and Florence Tupin. A note on nice-levelable MRFs for SAR image denoising with contrast preservation. Technical Report 2006D006, Signal and Image Processing Group, Ecole Nationale Supérieure des Télécommunications, Paris, France, September 2006.
120. Jérôme Darbon, Marc Sigelle, and Florence Tupin. The use of levelable regularization functions for MRF restoration of SAR images. In *Proceedings of the 19th Symposium SPIE on Electronic Imaging*, San Jose, CA, USA, January 2007.
121. Jérôme Darbon. A note on the discrete binary Mumford-Shah model. In *Proceedings of the international Computer Vision / Computer Graphics Collaboration Techniques and Applications (MIRAGE 2007)*, Paris, France, March 2007.
122. Jérôme Darbon. Global optimization for first order Markov random fields with submodular priors. In *Proceedings of the twelfth International Workshop on Combinatorial Image Analysis (IWCIA'08)*, Buffalo, New York, USA, April 2008.
123. Valentin David, Akim Demaille, Renaud Durlin, and Olivier Gournet. C/C++ disambiguation using attribute grammars, May 2005. Communication to Stratego Users Day 2005.
124. Valentin David, Akim Demaille, and Olivier Gournet. Attribute grammars for modular disambiguation. In *Proceedings of the IEEE 2nd International Conference on Intelligent Computer Communication and Processing (ICCP'06)*, Technical University of Cluj-Napoca, Romania, September 2006.
125. Réda Dehak, Isabelle Bloch, and Henri Maître. Spatial reasoning with relative incomplete information on relative positioning. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 27(9):1473–1484, September 2005.
126. Réda Dehak, Charles-Alban Deledalle, and Najim Dehak. LRDE system description. In *NIST SRE'06 Workshop: speaker recognition evaluation campaign*, San Juan, Puerto Rico, June 2006.
127. Réda Dehak, Najim Dehak, Patrick Kenny, and Pierre Dumouchel. Linear and non linear kernel GMM supervector machines for speaker verification. In *Proceedings of the European Conference on Speech Communication and Technologies (Interspeech'07)*, Antwerp, Belgium, August 2007.
128. Réda Dehak, Najim Dehak, and Patrick Kenny. The LRDE systems for the 2008 NIST speaker recognition evaluation. In *NIST-SRE 2008*, Montréal, Canada, June 2008.
129. Réda Dehak, Najim Dehak, Patrick Kenny, and Pierre Dumouchel. Kernel combination for SVM speaker verification. In *Proceedings of the Speaker and Language Recognition Workshop (IEEE-Odyssey 2008)*, Stellenbosch, South Africa, January 2008.

130. Najim Dehak, Réda Dehak, Patrick Kenny, and Pierre Dumouchel. Comparison between factor analysis and GMM support vector machines for speaker verification. In *Proceedings of the Speaker and Language Recognition Workshop (IEEE-Odyssey 2008)*, Stellenbosch, South Africa, January 2008.
131. Najim Dehak, Patrick Kenny, Réda Dehak, Ondrej Glembert, Pierre Dumouchel, Lukas Burget, Valiantsina Hubeika, and Fabio Castaldo. Support vector machines and joint factor analysis for speaker verification. In *IEEE-ICASSP*, Taipei - Taiwan, April 2009.
132. Najim Dehak, Réda Dehak, Patrick Kenny, Niko Brummer, Pierre Ouellet, and Pierre Dumouchel. Support vector machines versus fast scoring in the low-dimensional total variability space for speaker verification. In *Interspeech*, September 2009.
133. Pierre Dumouchel, Najim Dehak, Yazid Attabi, Réda Dehak, and Narjès Boufaden. Cepstral and long-term features for emotion recognition. In *Interspeech*, September 2009. Open Performance Sub-Challenge Prize.
134. Réda Dehak and Najim Dehak. Lrde Speaker Recognition System for NIST-SRE 2010. In *NIST 2010 Speaker Recognition Evaluation*, Brno, CZ, 2010.
135. Najim Dehak, Réda Dehak, J. Glass, D. Reynolds, and P. Kenny. Cosine Similarity Scoring without Score Normalization Techniques. In *Odyssey The Speaker and Language Recognition*, Brno, Czech Republic, 2010.
136. S. Shum, Najim Dehak, Réda Dehak, and J. Glass. Unsupervised Speaker Adaptation based on the Cosine Similarity for Text-Independent Speaker Verification. In *Odyssey The Speaker and Language Recognition*, Brno, Czech Republic, 2010.
137. Najim Dehak, Z. Karam, D. Reynolds, Réda Dehak, W. Campbell, and J. Glass. A Channel-Blind System for Speaker Verification. In *International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, pages 4536–4539, Prague, Czech Republic, May 2011.
138. Najim Dehak, Pedro A. Torres-Carrasquillo, Douglas Reynolds, and Reda Dehak. Language Recognition via I-Vectors and Dimensionality Reduction. In *INTERSPEECH 2011*, pages 857–860, Florence, Italy, August 2011.
139. Najim Dehak, P. Kenny, Réda Dehak, P. Dumouchel, and P. Ouellet. Front-End Factor Analysis For Speaker Verification. *IEEE Transactions on Audio, Speech, and Language Processing*, 13(4):788–798, May 2011.
140. Najim Dehak, O. Plchot, M.H. Bahari, L. Burget, H. Van hamme, and Réda Dehak. GMM weights adaptation based on subspace approaches for speaker verification. In *Odyssey 2014, The Speaker and Language Recognition Workshop*, pages 48–53, Joensuu, Finland, June 2014.
141. Pedro A. Torres-Carrasquillo, Frederick Richardson, Shahan Nercessian, Douglas Sturim, William Campbell, Youngjune Gwon, Swaroop Vattam, Reda Dehak, Harish Mallidi, Phani Sankar Nidadavolu, Ruizhi Li, Raghavendra Reddy Pappagari, Nanxin Chen, Najim Dehak, and Ruben Zazo. The Mit Lincoln Laboratory 2016 speaker recognition system. In *NIST Speaker Recognition Evaluation 2016*, San Diego, California, December 2016.
142. Akim Demaille. Making compiler construction projects relevant to core curriculums. In *Proceedings of the Tenth Annual Conference on Innovation and Technology in Computer Science Education (ITICSE'05)*, pages 266–270, Universidade Nova de Lisboa, Monte da Pacarita, Portugal, June 2005.
143. Akim Demaille, Sylvain Peyronnet, and Benoît Sigoure. Modeling of sensor networks using XRM. In *Proceedings of the 2nd International Symposium on Leveraging Applications of Formal Methods, Verification and Validation (ISoLA'06)*, Coral Beach Resort, Paphos, Cyprus, November 2006.
144. Akim Demaille, Sylvain Peyronnet, and Thomas Hérault. Probabilistic verification of sensor networks. In *Proceedings of the Fourth International Conference on Computer Sciences, Research, Innovation and Vision for the Future (RIVF'06)*, Ho Chi Minh City, Vietnam, February 2006.

145. Akim Demaille, Alexandre Duret-Lutz, Florian Lesaint, Sylvain Lombardy, Jacques Sakarovitch, and Florent Terrones. An XML format proposal for the description of weighted automata, transducers, and regular expressions. In Jakub Piskorski, Bruce W. Watson, and Anssi Yli-Jyrä, editors, *Post-proceedings of the seventh international workshop on Finite-State Methods and Natural Language Processing (FSMNLP'08)*, volume 19 of *Frontiers in Artificial Intelligence and Applications*, pages 199–206, Ispra, Italia, September 2009. IOS Press.
146. Akim Demaille, Roland Levillain, and Benoît Perrot. A set of tools to teach compiler construction. In *Proceedings of the Thirteenth Annual Conference on Innovation and Technology in Computer Science Education (ITICSE'08)*, pages 68–72, Universidad Politécnica de Madrid, Spain, June 2008.
147. Akim Demaille and Roland Levillain. Compiler construction as an effective application to teach object-oriented programming. The seventh “Killer Examples” workshop, Worked Examples for Sound OO Pedagogy, at OOPSLA'08, October 2008. Oral presentation.
148. Akim Demaille, Renaud Durlin, Nicolas Pierron, and Benoît Sigoure. Semantics driven disambiguation: A comparison of different approaches. In *Proceedings of the 8th workshop on Language Descriptions, Tools and Applications (LDTA'08)*, 2008.
149. Akim Demaille, Roland Levillain, and Benoît Sigoure. TWEAST: A simple and effective technique to implement concrete-syntax AST rewriting using partial parsing. In *Proceedings of the 24th Annual ACM Symposium on Applied Computing (SAC'09)*, pages 1924–1929, Waikiki Beach, Honolulu, Hawaii, USA, March 2009.
150. Akim Demaille, Alexandre Duret-Lutz, Sylvain Lombardy, and Jacques Sakarovitch. Implementation concepts in Vaucanson 2. In Stavros Konstantinidis, editor, *Proceedings of Implementation and Application of Automata, 18th International Conference (CIAA'13)*, volume 7982 of *Lecture Notes in Computer Science*, pages 122–133, Halifax, NS, Canada, July 2013. Springer. doi:10.1007/978-3-642-39274-0_12.
151. Akim Demaille, Alexandre Duret-Lutz, Sylvain Lombardy, Luca Saiu, and Jacques Sakarovitch. A type system for weighted automata and rational expressions. In *Proceedings of Implementation and Application of Automata, 19th International Conference (CIAA'14)*, volume 8587 of *Lecture Notes in Computer Science*, Giessen, Germany, July 2014. Springer. doi:10.1007/978-3-319-08846-4_12.
152. Akim Demaille. Derived-term automata of multitape rational expressions. In Yo-Sub Han and Kai Salomaa, editors, *Proceedings of Implementation and Application of Automata, 21st International Conference (CIAA'16)*, volume 9705 of *Lecture Notes in Computer Science*, pages 51–63, Seoul, South Korea, July 2016. Springer. doi:10.1007/978-3-319-40946-7_5.
153. Akim Demaille. Derived-term automata for extended weighted rational expressions. In *Proceedings of the Thirteenth International Colloquium on Theoretical Aspects of Computing (ICTAC)*, Lecture Notes in Computer Science, Taipei, Taiwan, October 2016. Springer.
154. Akim Demaille and Thibaud Michaud. Derived-term automata of weighted rational expressions with quotient operators. In *Proceedings of the Thirteenth International Colloquium on Theoretical Aspects of Computing (ICTAC)*, volume 10580 of *Lecture Notes in Computer Science*, pages 155–173, Hanoi, Vietnam, October 2017. Springer.
155. Akim Demaille. Derived-term automata of multitape expressions with composition. *Scientific Annals of Computer Science*, 27(2):137–176, 2017. doi:10.7561/SACS.2017.2.137.
156. Alain Denise, Marie-Claude Gaudel, Sandrine-Dominique Gouraud, Richard Lassaigne, and Sylvain Peyronnet. Uniform random sampling of traces in very large models. In *Proceedings of the 1st international workshop on Random Testing 2006 (RT06)*, ACM digital library, pages 10–19, 2006.
157. Lamine Diop, Cheikh Talibouya Diop, Arnaud Giacometti, Dominique Li, and Arnaud Soulet. Trie-based output itemset sampling. In *2022 IEEE International Conference on*

- Big Data (Big Data)*, pages 1–10, Osaka, Japan, December 2022. IEEE. accepted. doi: [10.1109/BigDataXXXX](https://doi.org/10.1109/BigDataXXXX).
158. Eelco Dolstra, Andres Löh, and Nicolas Pierron. NixOS: A purely functional Linux distribution. *Journal of Functional Programming*, 2010. Published online by Cambridge University Press 15 Oct 2010. doi:[10.1017/S0956796810000195](https://doi.org/10.1017/S0956796810000195).
 159. Jordan Drapeau, Thierry Géraud, Mickaël Coustaty, Joseph Chazalon, Jean-Christophe Burie, Véronique Eglin, and Stéphane Bres. Extraction of ancient map contents using trees of connected components. In *Proceedings of the 12th IAPR International Workshop on Graphics Recognition (GREC)*, Kyoto, Japan, November 2017. doi:[10.1007/978-3-030-02284-6_9](https://doi.org/10.1007/978-3-030-02284-6_9).
 160. Manfred Droste, Sven Dziadek, and Werner Kuich. Greibach normal form for ω -algebraic systems and weighted simple ω -pushdown automata. *Information and Computation*, 285(B):104871, May 2022. doi:[10.1016/j.ic.2022.104871](https://doi.org/10.1016/j.ic.2022.104871).
 161. Lucas Drumetz, Guillaume Tochon, Jocelyn Chanussot, and Christian Jutten. Estimating the number of endmembers to use in spectral unmixing of hyperspectral data with collaborative sparsity. In *Proceedings of the 13th International Conference on Latent Variable Analysis and Signal Separation (LVA-ICA)*, Grenoble, France, February 2017.
 162. Lucas Drumetz, Mauro Dalla Mura, Guillaume Tochon, and Ronan Fablet. Learning end-member dynamics in multitemporal hyperspectral data using a state-space model formulation. In *Proceedings of the 45th IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, pages 2483–2487, Barcelona, Spain, May 2020. doi: [10.1109/ICASSP40776.2020.9053787](https://doi.org/10.1109/ICASSP40776.2020.9053787).
 163. Séverine Dubuisson, Myriam Robert-Seidowsky, and Jonathan Fabrizio. A self-adaptive likelihood function for tracking with particle filter. In *Proceedings of the 10th International Conference on Computer Vision Theory and Applications (VISAPP)*, pages 446–453, March 2015. doi:[10.5220/0005260004460453](https://doi.org/10.5220/0005260004460453).
 164. Marie Duflot, Laurent Fribourg, Thomas Herault, Richard Lassaigne, Frédéric Magniette, Stephane Messika, Sylvain Peyronnet, and Claudine Picaronny. Probabilistic model checking of the CSMA/CD, protocol using PRISM and APMC. In *Proceedings of the 4th International Workshop on Automated Verification of Critical Systems (AVoCS)*, volume 128 of *Electronic Notes in Theoretical Computer Science Series*, pages 195–214, 2004.
 165. Marie Duflot, Marta Kwiatkowska, Gethin Norman, Dave Parker, Sylvain Peyronnet, Claudine Picaronny, and Jeremy Sproston. Practical application of probabilistic model checking to communication protocols. In Stefania Gnesi and Tiziana Margaria, editors, *FMICS Handbook on Industrial Critical Systems*, chapter 7. 2006. To appear.
 166. Pierre Duluard, Xinqing Li, Marc Plantevit, Céline Robardet, and Romain Vuillemot. Discovering and visualizing tactics in table tennis games based on subgroup discovery. In *Machine Learning and Data Mining for Sports Analytics - 9th International Workshop, MLSA 2022*, September 2022. Workshop co-located with ECMLPKDD’22.
 167. Alexandre Duret-Lutz. Olena: a component-based platform for image processing, mixing generic, generative and OO programming. In *Proceedings of the 2nd International Symposium on Generative and Component-Based Software Engineering (GCSE)—Young Researchers Workshop; published in “Net.ObjectDays2000”*, pages 653–659, Erfurt, Germany, October 2000.
 168. Alexandre Duret-Lutz. Expression templates in Ada 95. In *Proceedings of the 6th International Conference on Reliable Software Technologies (Ada-Europe)*, volume 2043 of *Lecture Notes in Computer Science Series*, pages 191–202, Leuven, Belgium, May 2001. Springer-Verlag. Best Paper Award.
 169. Alexandre Duret-Lutz, Thierry Géraud, and Akim Demaille. Generic design patterns in C++. In *Proceedings of the 6th USENIX Conference on Object-Oriented Technologies*

- and Systems (COOTS)*, pages 189–202, San Antonio, TX, USA, January-February 2001. USENIX Association.
170. Alexandre Duret-Lutz, Denis Poitrenaud, and Jean-Michel Couvreur. On-the-fly emptiness check of transition-based Streett automata. In Zhiming Liu and Anders P. Ravn, editors, *Proceedings of the 7th International Symposium on Automated Technology for Verification and Analysis (ATVA '09)*, volume 5799 of *Lecture Notes in Computer Science*, pages 213–227. Springer-Verlag, 2009. doi:10.1007/978-3-642-04761-9_17.
 171. Alexandre Duret-Lutz, Kais Klai, Denis Poitrenaud, and Yann Thierry-Mieg. Combining explicit and symbolic approaches for better on-the-fly LTL model checking. Technical Report 1106.5700, arXiv, June 2011. Extended version of our ATVA'11 paper, presenting two new techniques instead of one. URL: <http://arxiv.org/abs/1106.5700>.
 172. Alexandre Duret-Lutz, Kais Klai, Denis Poitrenaud, and Yann Thierry-Mieg. Self-loop aggregation product — a new hybrid approach to on-the-fly LTL model checking. In *Proceedings of the 9th International Symposium on Automated Technology for Verification and Analysis (ATVA '11)*, volume 6996 of *Lecture Notes in Computer Science*, pages 336–350, Taipei, Taiwan, October 2011. Springer. doi:10.1007/978-3-642-24372-1_24.
 173. Alexandre Duret-Lutz. Building LTL model checkers using Transition-based Generalized Büchi Automata. Invited talk to SUMo'11, June 2011.
 174. Alexandre Duret-Lutz. LTL translation improvements in Spot. In *Proceedings of the 5th International Workshop on Verification and Evaluation of Computer and Communication Systems (VECoS'11)*, Electronic Workshops in Computing, Tunis, Tunisia, September 2011. British Computer Society. URL: <http://ewic.bcs.org/category/15853>.
 175. Alexandre Duret-Lutz. Manipulating LTL formulas using Spot 1.0. In *Proceedings of the 11th International Symposium on Automated Technology for Verification and Analysis (ATVA '13)*, volume 8172 of *Lecture Notes in Computer Science*, pages 442–445, Hanoi, Vietnam, October 2013. Springer. doi:10.1007/978-3-319-02444-8_31.
 176. Alexandre Duret-Lutz. LTL translation improvements in Spot 1.0. *International Journal on Critical Computer-Based Systems*, 5(1/2):31–54, March 2014. doi:10.1504/IJCCBS.2014.059594.
 177. Alexandre Duret-Lutz, Fabrice Kordon, Denis Poitrenaud, and Etienne Renault. Heuristics for checking liveness properties with partial order reductions. In *Proceedings of the 14th International Symposium on Automated Technology for Verification and Analysis (ATVA '16)*, volume 9938 of *Lecture Notes in Computer Science*, pages 340–356. Springer, October 2016. doi:10.1007/978-3-319-46520-3_22.
 178. Alexandre Duret-Lutz, Alexandre Lewkowicz, Amaury Fauchille, Thibaud Michaud, Etienne Renault, and Laurent Xu. Spot 2.0 — a framework for LTL and ω -automata manipulation. In *Proceedings of the 14th International Symposium on Automated Technology for Verification and Analysis (ATVA '16)*, volume 9938 of *Lecture Notes in Computer Science*, pages 122–129. Springer, October 2016. doi:10.1007/978-3-319-46520-3_8.
 179. Alexandre Duret-Lutz. *Contributions to LTL and ω -Automata for Model Checking*. Habilitation thesis, Université Pierre et Marie Curie (Paris 6), February 2017.
 180. Alexandre Duret-Lutz, Etienne Renault, Maximilien Colange, Florian Renkin, Alexandre Gbaguidi Aisse, Philipp Schlehuber-Caissier, Thomas Medioni, Antoine Martin, Jérôme Dubois, Clément Gillard, and Henrich Lauko. From Spot 2.0 to Spot 2.10: What's new? In *Proceedings of the 34th International Conference on Computer Aided Verification (CAV'22)*, volume 13372 of *Lecture Notes in Computer Science*, pages 174–187. Springer, August 2022. doi:10.1007/978-3-031-13188-2_9.
 181. Sven Dziadek, Uli Fahrenberg, and Philipp Schlehuber-Caissier. Energy problems in finite and timed automata with Büchi conditions. In *International Symposium on Formal Methods (FM)*, Lecture Notes in Computer Science. Springer, March 2023. Accepted.

182. Nour El Madhoun, Emmanuel Bertin, Mohamad Badra, and Guy Pujolle. New security protocols for offline point-of-sale machines. In *36th International Conference on Advanced Information Networking and Applications (AINA)*, volume 450 of *Lecture Notes in Networks and Systems*. Springer, 2022. doi:10.1007/978-3-030-99587-4_38.
183. Darine Al-Mohtar, Amani Ramzi Daou, Nour El Madhoun, and Rachad Maallawi. A secure blockchain-based architecture for the COVID-19 data network. In *2021 5th Cyber Security in Networking Conference (CSNet)*, pages 1–5, October 2021. URL: <https://ieeexplore.ieee.org/document/9614272>, doi:10.1109/CSNet52717.2021.9614272.
184. Marc Espie. Debug packages in OpenBSD. In *EuroBSDCon 2021*, 2021. URL: <https://www.openbsd.org/papers/eurobsdcon2021-espie-debug.pdf>.
185. Baptiste Esteban, Guillaume Tochon, and Thierry Géraud. Estimating the noise level function with the tree of shapes and non-parametric statistics. In *Proceedings of the 18th International Conference on Computer Analysis of Images and Patterns (CAIP)*, volume 11679 of *Lecture Notes in Computer Science Series*, pages 377–388, Salerno, Italy, September 2019. Springer. doi:10.1007/978-3-030-29891-3_33.
186. Baptiste Esteban, Guillaume Tochon, and Thierry Géraud. Estimation du niveau de bruit par arbre des formes et statistiques non paramétriques. In *Proceedings of the 27st Symposium on Signal and Image Processing (GRETSI)*, Lille, France, August 2019.
187. Baptiste Esteban, Edwin Carlinet, Guillaume Tochon, and Didier Verna. The cost of dynamism in static languages for image processing. In *Proceedings of the 21st International Conference on Generative Programming: Concepts & Experiences (GPCE 2022)*, Auckland, New Zealand, December 2022. doi:10.1145/3564719.3568693.
188. Baptiste Esteban, Guillaume Tochon, Edwin Carlinet, and Didier Verna. Estimation de la fonction de niveau de bruit pour des images couleurs en utilisant la morphologie mathématique. In *28e Colloque sur le traitement du signal et des images*, number 001-0238, pages 953–956, Nancy, France, September 2022. GRETSI - Groupe de Recherche en Traitement du Signal et des Images.
189. Baptiste Esteban, Edwin Carlinet, Guillaume Tochon, and Didier Verna. Généricité dynamique pour des algorithmes morphologiques. In *28e Colloque sur le traitement du signal et des images*, number 001-0119, pages 477–480, Nancy, France, September 2022. GRETSI - Groupe de Recherche en Traitement du Signal et des Images.
190. Baptiste Esteban, Guillaume Tochon, Edwin Carlinet, and Didier Verna. Estimation of the noise level function for color images using mathematical morphology and non-parametric statistics. In *Proceedings of the 26th International Conference on Pattern Recognition*, pages 428–434, Montréal, Québec, August 2022. doi:10.1109/ICPR56361.2022.9956218.
191. Joaquim Estopinan, Guillaume Tochon, and Lucas Drumetz. Learning Sentinel-2 spectral dynamics for long-run predictions using residual neural networks. In *Proceedings of the 29th European Signal Processing Conference (EUSIPCO)*, Dublin, Ireland, August 2021. doi:10.23919/EUSIPCO54536.2021.9616304.
192. Yoann Fabre, Guillaume Pitel, Laurent Soubrevilla, Emmanuel Marchand, Thierry Géraud, and Akim Demaille. An asynchronous architecture to manage communication, display, and user interaction in distributed virtual environments. In J.D. Mulder and R. van Liere, editors, *Virtual Environments 2000, Proceedings of the 6th Eurographics Workshop on Virtual Environments (EGVE)*, Computer Science / Eurographics Series, pages 105–113, Amsterdam, The Netherlands, June 2000. Springer-Verlag WienNewYork.
193. Yoann Fabre, Guillaume Pitel, and Didier Verna. Urbi et Orbi: unusual design and implementation choices for distributed virtual environments. In *Proceedings of the 6th International Conference on Virtual Systems and MultiMedia (VSMM)—Intelligent Environments Workshop*, pages 714–724, Gifu, Japan, October 2000. IOS Press, USA.
194. Yoann Fabre, Guillaume Pitel, Laurent Soubrevilla, Emmanuel Marchand, Thierry Géraud, and Akim Demaille. A framework to dynamically manage distributed virtual environments.

- In J.-C. Heudin, editor, *Proceedings of the 2nd International Conference on Virtual Worlds (VW)*, volume LNAI 1834 of *Lecture Notes in Computer Science Series*, pages 54–64, Paris, France, July 2000. Springer Verlag.
195. Jonathan Fabrizio, Séverine Dubuisson, and Dominique Béréziat. Motion compensation based on tangent distance prediction for video compression. *Signal Processing: Image Communication*, 27(2):113–208, February 2012.
 196. Jonathan Fabrizio, Beatriz Marcotegui, and Matthieu Cord. Text detection in street level image. *Pattern Analysis and Applications*, 16(4):519–533, November 2013.
 197. Jonathan Fabrizio. A precise skew estimation algorithm for document images using KNN clustering and fourier transform. In *Proceedings of the 21st International Conference on Image Processing (ICIP)*, pages 2585–2588, Paris, France, 2014. doi:10.1109/ICIP.2014.7025523.
 198. Jonathan Fabrizio, Myriam Robert-Seidowsky, Séverine Dubuisson, Stefania Calarasanu, and Raphaël Boissel. Textcatcher: A method to detect curved and challenging text in natural scenes. *International Journal on Document Analysis and Recognition*, 19(2):99–117, February 2016. doi:10.1007/s10032-016-0264-4.
 199. Uli Fahrenberg, Christian Johansen, Georg Struth, and Krzysztof Ziemiański. A Kleene theorem for higher-dimensional automata. In Bartek Klin, Sławomir Lasota, and Anca Muscholl, editors, *33rd International Conference on Concurrency Theory (CONCUR 2022)*, volume 243 of *Leibniz International Proceedings in Informatics (LIPIcs)*, pages 29:1–29:18, Dagstuhl, Germany, September 2022. Schloss Dagstuhl – Leibniz-Zentrum für Informatik. URL: <https://drops.dagstuhl.de/opus/volltexte/2022/17092>, doi:10.4230/LIPIcs.CONCUR.2022.29.
 200. Uli Fahrenberg, Christian Johansen, Georg Struth, and Krzysztof Ziemiański. Posets with interfaces as a model for concurrency. *Information and Computation*, 285(B):104914, May 2022. doi:10.1016/j.ic.2022.104914.
 201. Uli Fahrenberg. Higher-dimensional timed and hybrid automata. *Leibniz Transactions on Embedded Systems*, 8(2):03:1–03:16, December 2022. URL: <https://ojs.dagstuhl.de/index.php/lites/article/view/lites-v008-i002-a003>, doi:10.4230/LITES.8.2.3.
 202. Uli Fahrenberg and Axel Legay. Featured games. *Science of Computer Programming*, 223:102874, November 2022. URL: <https://www.sciencedirect.com/science/article/pii/S0167642322001071>, doi:https://doi.org/10.1016/j.scico.2022.102874.
 203. Geoffroy Fouquier, Jamal Atif, and Isabelle Bloch. Local reasoning in fuzzy attribute graphs for optimizing sequential segmentation. In F. Escolano and M. Vento, editors, *Proceedings of the 6th IAPR TC-15 Workshop on Graph-based Representations in Pattern Recognition (GBR)*, volume LNCS 4538, pages 138–147, Alicante, Spain, June 2007. Springer Verlag.
 204. Geoffroy Fouquier, Laurence Likforman, Jérôme Darbon, and Bulent Sankur. The biosecure geometry-based system for hand modality. In *Proceedings of the 32nd IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, volume I, pages 801–804, Honolulu, Hawaii, USA, April 2007.
 205. Lukasz Fronc and Alexandre Duret-Lutz. LTL model checking with Neco. In *Proceedings of the 11th International Symposium on Automated Technology for Verification and Analysis (ATVA ’13)*, volume 8172 of *Lecture Notes in Computer Science*, pages 451–454, Hanoi, Vietnam, October 2013. Springer. doi:10.1007/978-3-319-02444-8_33.
 206. Thierry Géraud, Isabelle Bloch, and Henri Maître. Atlas-guided recognition of cerebral structures in MRI using fusion of fuzzy structural information. In *Proceeding of CIMAF Symposium on Artificial Intelligence*, pages 99–106, La Havana, Cuba, 1999. EPITA as current address.
 207. Thierry Géraud, Yoann Fabre, Dimitri Papadopoulos-Orfanos, and Jean-François Mangin. Vers une réutilisabilité totale des algorithmes de traitement d’images. In *Proceedings of*

- the 17th Symposium on Signal and Image Processing (GRETSI)*, volume 2, pages 331–334, Vannes, France, September 1999. In French.
208. Thierry Géraud and Alexandre Duret-Lutz. Generic programming redesign of patterns. In *Proceedings of the 5th European Conference on Pattern Languages of Programs (EuroPLoP)*, pages 283–294, Irsee, Germany, July 2000. UVK, Univ. Verlag, Konstanz.
 209. Thierry Géraud, Yoann Fabre, Alexandre Duret-Lutz, Dimitri Papadopoulos-Orfanos, and Jean-François Mangin. Obtaining genericity for image processing and pattern recognition algorithms. In *Proceedings of the 15th International Conference on Pattern Recognition (ICPR)*, volume 4, pages 816–819, Barcelona, Spain, September 2000. IEEE Computer Society.
 210. Thierry Géraud, Isabelle Bloch, and Henri Maître. Reconnaissance de structures cérébrales à l’aide d’un atlas et par fusion d’informations structurelles floues. In *Actes du 12ème Congrès Francophone AFRIF-AFIA de Reconnaissance des Formes et Intelligence Artificielle (RFIA)*, volume 1, pages 287–295, Paris, France, February 2000. EPITA as current address.
 211. Thierry Géraud, Yoann Fabre, and Alexandre Duret-Lutz. Applying generic programming to image processing. In M.H. Hamsa, editor, *Proceedings of the IASTED International Conference on Applied Informatics (AI)—Symposium on Advances in Computer Applications*, pages 577–581, Innsbruck, Austria, February 2001. ACTA Press.
 212. Thierry Géraud, Pierre-Yves Strub, and Jérôme Darbon. Color image segmentation based on automatic morphological clustering. In *Proceedings of the IEEE International Conference on Image Processing (ICIP)*, volume 3, pages 70–73, Thessaloniki, Greece, October 2001.
 213. Thierry Géraud, Pierre-Yves Strub, and Jérôme Darbon. Segmentation d’images en couleur par classification morphologique non supervisée. In *Proceedings of the International Conference on Image and Signal Processing (ICISP)*, pages 387–394, Agadir, Morocco, May 2001. Faculty of Sciences at Ibn Zohr University, Morocco. In French.
 214. Thierry Géraud, Geoffroy Fouquier, Quoc Peyrot, Nicolas Lucas, and Franck Signorile. Document type recognition using evidence theory. In *Proceedings of the 5th IAPR International Workshop on Graphics Recognition (GREC)*, pages 212–221, Computer Vision Center, UAB, Barcelona, Spain, July 2003.
 215. Thierry Géraud. Segmentation of curvilinear objects using a watershed-based curve adjacency graph. In Springer-Verlag, editor, *Proceedings of the 1st Iberian Conference on Pattern Recognition and Image Analysis (IbPRIA)*, volume 2652 of *Lecture Notes in Computer Science Series*, pages 279–286, Mallorca, Spain, June 2003. Springer-Verlag.
 216. Thierry Géraud. Segmentation d’objets curvilignes à l’aide des champs de markov sur un graphe d’adjacence de courbes issu de l’algorithme de la ligne de partage des eaux. In *Proceedings of the International Conference on Image and Signal Processing (ICISP)*, volume 2, pages 404–411, Agadir, Morocco, June 2003. Faculty of Sciences at Ibn Zohr University, Morocco. In French.
 217. Thierry Géraud. Fast road network extraction in satellite images using mathematical morphology and MRF. In *Proceedings of the EURASIP Workshop on Nonlinear Signal and Image Processing (NSIP)*, Trieste, Italy, June 2003.
 218. Thierry Géraud, Giovanni Palma, and Niels Van Vliet. Fast color image segmentation based on levellings in feature space. In Kluwer Academic Publishers, editor, *Computer Vision and Graphics—International Conference on Computer Vision and Graphics (ICCVG)*, Warsaw, Poland, September 2004, volume 32 of *Computational Imaging and Vision*, pages 800–807, 2004. On CD.
 219. Thierry Géraud and Jean-Baptiste Mouret. Fast road network extraction in satellite images using mathematical morphology and Markov random fields. *EURASIP Journal on Applied*

- Signal Processing*, 2004(16):2503–2514, November 2004. Special issue on Nonlinear Signal and Image Processing - Part II. doi:<http://doi.acm.org/10.1155/S1110865704409093>.
220. Thierry Géraud. Ruminations on Tarjan’s Union-Find algorithm and connected operators. In *Proceedings of the 7th International Symposium on Mathematical Morphology (ISMM’05)*, volume 30 of *Computational Imaging and Vision*, pages 105–116, Paris, France, April 2005. Springer.
221. Thierry Géraud and Roland Levillain. Semantics-driven genericity: A sequel to the static C++ object-oriented programming paradigm (SCOOP 2). In *Proceedings of the 6th International Workshop on Multiparadigm Programming with Object-Oriented Languages (MPOOL)*, Paphos, Cyprus, July 2008.
222. Thierry Géraud, Hugues Talbot, and Marc Van Droogenbroeck. Algorithms for mathematical morphology. In Laurent Najman and Hugues Talbot, editors, *Mathematical Morphology—From Theory to Applications*, pages 323–353. Wiley-ISTE, July 2010. URL: <http://eu.wiley.com/WileyCDA/WileyTitle/productCd-1848212151.html>.
223. Thierry Géraud, Hugues Talbot, and Marc Van Droogenbroeck. Morphologie et algorithmes. In Laurent Najman and Hugues Talbot, editors, *Morphologie mathématique 2 : estimation, choix et mise en œuvre*, IC2 signal et image, chapter 6, pages 151–180. Hermès Science Publications, September 2010.
224. Thierry Géraud. *Outil logiciel pour le traitement d’images: Bibliothèque, paradigmes, types et algorithmes*. Habilitation thesis, Université Paris-Est, June 2012. In French.
225. Thierry Géraud, Edwin Carlinet, Sébastien Crozet, and Laurent Najman. A quasi-linear algorithm to compute the tree of shapes of n -D images. In C.L. Luengo Hendriks, G. Borgefors, and R. Strand, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 11th International Symposium on Mathematical Morphology (ISMM)*, volume 7883 of *Lecture Notes in Computer Science Series*, pages 98–110, Uppsala, Sweden, 2013. Springer.
226. Thierry Géraud. A morphological method for music score staff removal. In *Proceedings of the 21st International Conference on Image Processing (ICIP)*, pages 2599–2603, Paris, France, 2014. doi:[10.1109/ICIP.2014.7025526](https://doi.org/10.1109/ICIP.2014.7025526).
227. Thierry Géraud, Edwin Carlinet, and Sébastien Crozet. Self-duality and digital topology: Links between the morphological tree of shapes and well-composed gray-level images. In J.A. Benediktsson, J. Chanussot, L. Najman, and H. Talbot, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 12th International Symposium on Mathematical Morphology (ISMM)*, volume 9082 of *Lecture Notes in Computer Science Series*, pages 573–584, Reykjavik, Iceland, 2015. Springer. doi:[10.1007/978-3-319-18720-4_48](https://doi.org/10.1007/978-3-319-18720-4_48).
228. Thierry Géraud, Yongchao Xu, Edwin Carlinet, and Nicolas Boutry. Introducing the Dahu pseudo-distance. In J. Angulo, S. Velasco-Forero, and F. Meyer, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 13th International Symposium on Mathematical Morphology (ISMM)*, volume 10225 of *Lecture Notes in Computer Science*, pages 55–67, Fontainebleau, France, May 2017. Springer. doi:[10.1007/978-3-319-57240-6_5](https://doi.org/10.1007/978-3-319-57240-6_5).
229. Markus Götz, Gabriele Cavallaro, Thierry Géraud, Matthias Book, and Morris Riedel. Parallel computation of component trees on distributed memory machines. *IEEE Transactions on Parallel and Distributed Systems*, 29(11):2582–2598, May 2018. doi:[10.1109/TPDS.2018.2829724](https://doi.org/10.1109/TPDS.2018.2829724).
230. Alexandre Borghi, Valentin David, Akim Demaille, and Olivier Gournet. Implementing attributes in SDF, May 2005. Communication to Stratego Users Day 2005.
231. Frederic Grelot, Sébastien Larinier, and Marie Salmon. Automation of binary analysis: From open source collection to threat intelligence. In *Proceedings of the 28th C&ESAR*, page 41, 2021.

232. Emmanuel Grosicki, Karim Abed-Meraim, and Réda Dehak. A novel method to fight the non line of sight error in AOA measurements for mobile location. In *Proceedings of the IEEE International Conference on Communications (ICC)*, volume 5, pages 2794–2798, Paris, France, June 2004.
233. Pierre Guillaume, Corentin Duchene, and Réda Dehak. Hate speech and toxic comment detection using transformers. In *Workshop EGC 2022 DL for NLP*, January 2022. accepted.
234. Pierre Guillaume, Corentin Duchene, and Reda Dehak. Hate speech and toxic comment detection using transformers. In *Workshop EGC 2022 DL for NLP*, January 2022.
235. Guillaume Guirado, Thomas Herault, Richard Lassaigne, and Sylvain Peyronnet. Distribution, approximation and probabilistic model checking. In *Proceedings of the 4th international workshop on Parallel and Distributed Model Checking (PDMC)*, 2005.
236. Antoine Hacquard and Didier Verna. A corpus processing and analysis pipeline for Quickref. In *Proceedings of the 14th European Lisp Symposium (ELS)*, pages 27–35, Online, May 2021. doi:10.5281/zenodo.4714443.
237. Alexandre Hamez, Fabrice Kordon, and Yann Thierry-Mieg. libDMC: a library to operate efficient distributed model checking. In *Workshop on Performance Optimization for High-Level Languages and Libraries — associated to IPDPS'2007*, 2007.
238. Alexandre Hamez, Yann Thierry-Mieg, and Fabrice Kordon. Hierarchical set decision diagrams and automatic saturation. In *Petri Nets and Other Models of Concurrency –ICATPN 2008*, 2008.
239. Alexandre Hamez, Yann Thierry-Mieg, and Fabrice Kordon. Building efficient model checkers using hierarchical set decision diagrams and automatic saturation. *Fundamenta Informaticae*, 2009.
240. Alexandre Hamez. *Génération efficace de grands espaces d'états*. PhD thesis, Université Pierre et Marie Curie - Paris VI, Paris, France, December 2009.
241. Badis Hammi, Sherali Zeadally, Yves Christian Elloh Adja, Manlio Del Giudice, and Jamel Nebhen. Blockchain-based solution for detecting and preventing fake check scams. *IEEE Transactions on Engineering Management*, pages 1–16, 2021. URL: <https://ieeexplore.ieee.org/document/9469218>, doi:10.1109/TEM.2021.3087112.
242. Sébastien Hémon, Michel de Rougemont, and Miklos Santha. Approximate Nash equilibria for multi-player games. In *1st International Symposium on Algorithmic Games Theory*, Paderborn, Germany, April 2008.
243. Thomas Héroult, Richard Lassaigne, and Sylvain Peyronnet. APMC 3.0: Approximate verification of discrete and continuous time markov chains. In *Proceedings of Qest 2006*, pages 129–130, 2006.
244. Romain Hermary, Guillaume Tochon, Élodie Puybareau, Alexandre Kirszenberg, and Jesús Angulo. Learning grayscale mathematical morphology with smooth morphological layers. *Journal of Mathematical Imaging and Vision*, April 2022. doi:10.1007/s10851-022-01091-1.
245. Lê Duy Huynh, Yongchao Xu, and Thierry Géraud. Morphology-based hierarchical representation with application to text segmentation in natural images. In *Proceedings of the 23rd International Conference on Pattern Recognition (ICPR)*, pages 4029–4034, Cancún, México, December 2016. IEEE Computer Society. doi:10.1109/ICPR.2016.7900264.
246. Lê Duy Huynh, Yongchao Xu, and Thierry Géraud. Morphological hierarchical image decomposition based on Laplacian 0-crossings. In J. Angulo, S. Velasco-Forero, and F. Meyer, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 13th International Symposium on Mathematical Morphology (ISMM)*, volume 10225 of *Lecture Notes in Computer Science*, pages 159–171, Fontainebleau, France, May 2017. Springer. doi:10.1007/978-3-319-57240-6_13.
247. Lê Duy Huynh. *Taking into account inclusion and adjacency information in morphological hierarchical representations, with application to the extraction of text in natural images and videos*. PhD thesis, Sorbonne Université, Paris, France, December 2018.

248. Lê Duy Huỳnh, Nicolas Boutry, and Thierry Géraud. Connected filters on generalized shape-spaces. *Pattern Recognition Letters*, 128:348–354, December 2019. doi:10.1016/j.patrec.2019.09.018.
249. Mouloud Iferroudjene, Corentin Lonjarret, Céline Robardet, Marc Plantevit, and Martin Atzmueller. Methods for explaining top-N recommendations through subgroup discovery. *Data Mining and Knowledge Discovery*, 313(118752), November 2022. doi:10.1007/s10618-022-00897-2.
250. Swen Jacobs, Nicolas Basset, Roderick Bloem, Romain Brenguier, Maximilien Colange, Peter Faymonville, Bernd Finkbeiner, Ayrat Khalimov, Felix Klein, Thibaud Michaud, Guillermo A. Pérez, Jean-François Raskin, Ocan Sankur, and Leander Tentrup. The 4th reactive synthesis competition (syntcomp 2017): Benchmarks, participants & results. In Dana Fisman and Swen Jacobs, editors, *Proceedings Sixth Workshop on Synthesis*, volume 260 of *Electronic Proceedings in Theoretical Computer Science*, pages 116–143, Heidelberg, Germany, July 2017. Open Publishing Association. doi:10.4204/EPTCS.260.10.
251. Ataollah Kamal, Elouan Vincent, Marc Plantevit, and Céline Robardet. Improving the quality of rule-based GNN explanations. In *ECML PKDD International Workshop on eXplainable Knowledge Discovery in Data Mining*, pages 1–16, Grenoble, France, September 2022. accepted.
252. Patrick Kenny, Najim Dehak, Réda Dehak, Vishwa Gupta, and Pierre Dumouchel. The role of speaker factors in the NIST extended data task. In *Proceedings of the Speaker and Language Recognition Workshop (IEEE-Odyssey 2008)*, Stellenbosch, South Africa, January 2008.
253. Anissa Kheireddine, Étienne Renault, and Souheib Baarrir. Towards better heuristics for solving bounded model checking problems. In Laurent D. Michel, editor, *Proceedings of the 27th International Conference on Principles and Practice of Constraint Programmings (CP)*, volume 210 of *Leibniz International Proceedings in Informatics (LIPIcs)*, pages 7:1–7:11, Montpellier, France (Virtual Conference), October 2021. Schloss Dagstuhl – Leibniz-Zentrum für Informatik. doi:10.4230/LIPIcs.CP.2021.7.
254. Anissa Kheireddine, Étienne Renault, and Souheib Baarrir. Tuning SAT solvers for LTL model checking. In *Proceedings of the 29th Asia-Pacific Software Engineering Conference (APSEC’22)*.
255. Anissa Kheireddine, Étienne Renault, and Souheib Baarrir. Towards better heuristics for solving bounded model checking problems. *Constraints*, ???:???, ??? ??? doi:10.4230/LIPIcs.CONSTRAINTS.2022.
256. Yoo Jung Kim, Hyungjoon Jang, Kyoungbun Lee, Seongkeun Park, Sung-Gyu Min, Choyeon Hong, Jeong Hwan Park, Kanggeun Lee, Jisoo Kim, Wonjae Hong, Hyun Jung, Yanling Liu, Haran Rajkumar, Mahendra Khened, Ganapathy Krishnamurthi, Sen Yang, Xiyue Wang, Chang Hee Han, Jin Tae Kwak, Jianqiang Ma, Zhe Tang, Bahram Marami, Jack Zeineh, Zixu Zhao, Pheng-Ann Heng, Rudiger Schmitz, Frederic Madesta, Thomas Rosch, Rene Werner, Jie Tian, Élodie Puybureau, Matteo Bovio, Xiufeng Zhang, Yifeng Zhu, Se Young Chun, Won-Ki Jeong, Peom Park, and Jinwook Choi. PAIP 2019: Liver cancer segmentation challenge. *Medical Image Analysis*, 67:101854, January 2021. doi:10.1016/j.media.2020.101854.
257. Alexandre Kirszenberg, Guillaume Tochon, Élodie Puybureau, and Jesus Angulo. Going beyond p-convolutions to learn grayscale morphological operators. In *Proceedings of the IAPR International Conference on Discrete Geometry and Mathematical Morphology (DGMM)*, volume 12708 of *Lecture Notes in Computer Science*, pages 470–482, Uppsala, Sweden, May 2021. Springer. doi:10.1007/978-3-030-76657-3_34.
258. Alexandre Kirszenberg, Antoine Martin, Hugo Moreau, and Etienne Renault. Go2Pins: A framework for the LTL verification of Go programs. In *Proceedings of the 27th International SPIN Symposium on Model Checking of Software (SPIN’21)*, volume 12864 of *Lecture*

- Notes in Computer Science*, pages 140–156, Aarhus, Denmark (online), May 2021. Springer, Cham. doi:10.1007/978-3-030-84629-9_8.
259. H. J. Kuijff, J. M. Biesbroek, J. de Bresser, R. Heinen, S. Andermatt, M. Bento, M. Berseth, M. Belyaev, M. J. Cardoso, A. Casamitjana, D. L. Collins, M. Dadar, A. Georgiou, M. Ghafoorian, D. Jin, A. Khademi, J. Knight, H. Li, X. Lladó, M. Luna, Q. Mahmood, R. McKinley, A. Mehrtash, S. Ourselin, B. Park, H. Park, S. H. Park, S. Pezold, Élodie Puybareau, L. Rittner, C. H. Sudre, S. Valverde, V. Vilaplana, R. Wiest, Yongchao Xu, Z. Xu, G. Zeng, J. Zhang, G. Zheng, C. Chen, W. van der Flier, F. Barkhof, M. A. Viergever, and G. J. Biessels. Standardized assessment of automatic segmentation of white matter hyperintensities: Results of the WMH segmentation challenge. *IEEE Transactions on Medical Imaging*, 38(11):2556–2568, November 2019. URL: [10.1109/TMI.2019.2905770](https://doi.org/10.1109/TMI.2019.2905770).
 260. Sophie Laplante, Richard Lassaigne, Frédéric Magniez, Sylvain Peyronnet, and Michel de Rougemont. Probabilistic abstraction for model checking: an approach based on property testing. *ACM Transactions on Computational Logic*, 8(4), August 2007.
 261. Richard Lassaigne and Sylvain Peyronnet. Probabilistic verification and approximation. In *Proceedings of 12th Workshop on Logic, Language, Information and Computation (Wollic)*, volume 143 of *Electronic Notes in Theoretical Computer Science*, pages 101–114, 2005.
 262. Guillaume Lazzara, Roland Levillain, Thierry Géraud, Yann Jacquélet, Julien Marquegnies, and Arthur Crépin-Leblond. The SCRIBO module of the Olena platform: a free software framework for document image analysis. In *Proceedings of the 11th International Conference on Document Analysis and Recognition (ICDAR)*, pages 252–258, Beijing, China, September 2011. International Association for Pattern Recognition (IAPR).
 263. Guillaume Lazzara and Thierry Géraud. Efficient multiscale Sauvola’s binarization. *International Journal of Document Analysis and Recognition (IJ DAR)*, 17(2):105–123, June 2014. doi:10.1007/s10032-013-0209-0.
 264. Guillaume Lazzara, Thierry Géraud, and Roland Levillain. Planting, growing and pruning trees: Connected filters applied to document image analysis. In *Proceedings of the 11th IAPR International Workshop on Document Analysis Systems (DAS)*, pages 36–40, Tours, France, April 2014. IAPR. doi:10.1109/DAS.2014.36.
 265. Ludovic Le Frioux, Souheib Baarir, Julien Sopena, and Fabrice Kordon. PaInleSS: a framework for parallel SAT solving. In *Proceedings of the 20th International Conference on Theory and Applications of Satisfiability Testing (SAT’17)*, volume 10491 of *Lecture Notes in Computer Science*, pages 233–250. Springer, Cham, August 2017.
 266. Ludovic Le Frioux. *Towards more efficient parallel SAT solving*. PhD thesis, Sorbonne Université, Paris, France, July 2019.
 267. Ludovic Le Frioux, Souheib Baarir, Julien Sopena, and Fabrice Kordon. Modular and efficient divide-and-conquer SAT solver on top of the Painless framework. In *Proceedings of the 25th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS’19)*, volume 11427 of *Lecture Notes in Computer Science*, pages 135–151. Springer, Cham, April 2019.
 268. Cuong Le Quoc, Patrick Bellot, and Akim Demaille. On the security of quantum networks: a proposal framework and its capacity. In *Proceedings of the 2007 International Conference on New Technologies, Mobility and Security (NTMS’07)*, Paris, France, May 2007.
 269. Cuong Le Quoc, Patrick Bellot, and Akim Demaille. Stochastic routing in large grid-shaped quantum networks. In *Proceedings of the Fifth International Conference on Computer Sciences, Research, Innovation and Vision for the Future (RIVF’07)*, Hanoi, Vietnam, March 2007.
 270. Cuong Le Quoc, Patrick Bellot, and Akim Demaille. Towards the world-wide quantum network. In *Proceedings of the 4th Information Security Practice and Experience Conference (ISPEC’08)*, Sydney, Australia, April 2008.

271. Sylvain Lefebvre, Jérôme Darbon, and Fabrice Neyret. Unified texture management for arbitrary meshes. Technical Report RR-5210, INRIA-Rhone-Alpes, France, May 2004.
272. Théo Lepage and Réda Dehak. Label-efficient self-supervised speaker verification with information maximization and contrastive learning. In *Proc. Interspeech 2022*, pages 4018–4022. ISCA, September 2022. accepted. doi:10.21437/Interspeech.2022-802.
273. David Lesage, Jérôme Darbon, and Ceyhun Burak Akgül. An efficient algorithm for connected attribute thinnings and thickenings. In *Proceedings of the second International Conference on Visual Computing*, volume 4292 of *Lecture Notes in Computer Science Series*, pages 393–404, Lake Tahoe, Nevada, USA, November 2006. Springer-Verlag.
274. Roland Levillain. Olena Project poster, October 2005.
275. Roland Levillain. Tiger Project poster, October 2005.
276. Roland Levillain, Thierry Géraud, and Laurent Najman. Milena: Write generic morphological algorithms once, run on many kinds of images. In Michael H. F. Wilkinson and Jos B. T. M. Roerdink, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the Ninth International Symposium on Mathematical Morphology (ISMM)*, volume 5720 of *Lecture Notes in Computer Science*, pages 295–306, Groningen, The Netherlands, August 2009. Springer Berlin / Heidelberg.
277. Roland Levillain, Thierry Géraud, and Laurent Najman. Why and how to design a generic and efficient image processing framework: The case of the Milena library. In *Proceedings of the IEEE International Conference on Image Processing (ICIP)*, pages 1941–1944, Hong Kong, September 2010.
278. Roland Levillain, Thierry Géraud, and Laurent Najman. Writing reusable digital geometry algorithms in a generic image processing framework. In *Proceedings of the Workshop on Applications of Digital Geometry and Mathematical Morphology (WADGMM)*, pages 96–100, Istanbul, Turkey, August 2010. URL: <http://mdigest.jrc.ec.europa.eu/wadgmm2010/>.
279. Roland Levillain, Thierry Géraud, and Laurent Najman. Une approche générique du logiciel pour le traitement d’images préservant les performances. In *Proceedings of the 23rd Symposium on Signal and Image Processing (GRETSI)*, Bordeaux, France, September 2011. In French.
280. Roland Levillain. *Towards a Software Architecture for Generic Image Processing*. PhD thesis, Université Paris-Est, Marne-la-Vallée, France, November 2011.
281. Roland Levillain, Thierry Géraud, and Laurent Najman. Writing reusable digital topology algorithms in a generic image processing framework. In Ullrich Köthe, Annick Montanvert, and Pierre Soille, editors, *WADGMM 2010*, volume 7346 of *Lecture Notes in Computer Science*, pages 140–153. Springer-Verlag Berlin Heidelberg, 2012.
282. Roland Levillain, Thierry Géraud, Laurent Najman, and Edwin Carlinet. Practical genericity: Writing image processing algorithms both reusable and efficient. In Eduardo Bayro and Edwin Hancock, editors, *Progress in Pattern Recognition, Image Analysis, Computer Vision, and Applications – Proceedings of the 19th Iberoamerican Congress on Pattern Recognition (CIARP)*, volume 8827 of *Lecture Notes in Computer Science*, pages 70–79, Puerto Vallarta, Mexico, November 2014. Springer-Verlag. doi:10.1007/978-3-319-12568-8_9.
283. Alban Linard. *Sémantique paramétrable des Diagrammes de Décision : une démarche vers l’unification*. PhD thesis, Université Pierre et Marie Curie - Paris VI, Paris, France, November 2009.
284. Alban Linard, Emmanuel Paviot-Adet, Fabrice Kordon, Didier Buchs, and Samuel Charron. polyDD: Towards a framework generalizing decision diagrams. In *Proceedings of the 10th International Conference on Application of Concurrency to System Design (ACSD)*, pages 124–133, Braga, Portugal, June 2010. IEEE Computer Society.
285. Sylvain Lombardy, Raphaël Poss, Yann Régis-Gianas, and Jacques Sakarovitch. Introducing Vaucanson. In Oscar H. Ibarra and Zhe Dang, editors, *Proceedings of Implementation and*

- Application of Automata, 8th International Conference (CIAA '03)*, volume 2759 of *Lecture Notes in Computer Science*, pages 96–107, Santa Barbara, CA, USA, July 2003. Springer.
286. Sylvain Lombardy, Yann Régis-Gianas, and Jacques Sakarovitch. Introducing Vaucanson. *Theoretical Computer Science*, 328:77–96, November 2004.
287. Francis Maes. Program templates: expression templates applied to program evaluation. In Jörg Striegnitz and Kei Davis, editors, *Proceedings of the Workshop on Declarative Programming in the Context of Object-Oriented Languages (DP-COOL; in conjunction with PLI)*, number FZJ-ZAM-IB-2003-10 in John von Neumann Institute for Computing (NIC), pages 67–86, Uppsala, Sweden, August 2003.
288. Francis Maes. Metagene, a C++ meta-program generation tool. In *Proceedings of the Workshop on Multiple Paradigm with OO Languages (MPOOL; in conjunction with ECOOP)*, Oslo, Norway, June 2004.
289. Daniel Maldonado-Ruiz, Jenny Torres, Nour El Madhoun, and Mohamad Badra. An innovative and decentralized identity framework based on blockchain technology. In *2021 11th IFIP International Conference on New Technologies, Mobility and Security (NTMS)*, pages 1–8, April 2021. URL: <https://ieeexplore.ieee.org/document/9432656>, doi: [10.1109/NTMS49979.2021.9432656](https://doi.org/10.1109/NTMS49979.2021.9432656).
290. Daniel Maldonado-Ruiz, Jenny Torres, Nour El Madhoun, and Mohamad Badra. Current trends in blockchain implementations on the paradigm of public key infrastructure: A survey. *IEEE Access*, 2022. URL: <https://ieeexplore.ieee.org/abstract/document/9687536>, doi: [10.1109/ACCESS.2022.3145156](https://doi.org/10.1109/ACCESS.2022.3145156).
291. J-L. Mandel, P. Burger, A. Strehle, F. Colin, T. Mazzucotelli, N. Collot, S. Baer, B. Durand, A. Piton, R. Coutelle, E. Schaefer, P. Parrend, L. Faivre, K. Jobard Garou, D. Geneviève, V. Ruault, D. Martin, R. Caumes, T. Smol, J. Ghoumid, F. Ropert Conquer, J. Kummeling, C. Ockeloen, T. Kleefstra, and D. Koolen. GenIDA, une base de données participative internationale permettant de mieux connaître l’histoire naturelle et les comorbidités des formes génétiques de troubles neurodéveloppementaux. In *Assises de Génétique Humaine et Médicale*, February 2022. URL: <http://icube-publis.unistra.fr/7-MBSC22>.
292. Caroline Mazini-Rodrigues, Nicolas Boutry, and Laurent Najman. Gradients intégrés renforcés, 2022. Accepted.
293. Raghav Mehta, Angelos Filos, Ujjwal Baid, Chiharu Sako, Richard McKinley, Michael Rebsamen, Katrin Dätwyler, Raphael Meier, Piotr Radojewski, Gowtham Krishnan Murugesan, Sahil Nalawade, Chandan Ganesh, Ben Wagner, Fang F. Yu, Baowei Fei, Ananth J. Madhuranthakam, Joseph A. Maldjian, Laura Daza, Catalina Gómez, Pablo Arbeláez, Chengliang Dai, Shuo Wang, Hadrien Reynaud, Yuanhan Mo, Elsa Angelini, Yike Guo, Wenjia Bai, Subhashis Banerjee, Linmin Pei, Murat AK, Sarahi Rosas-González, Ilyess Zemmoura, Clovis Tauber, Minh Hoang Vu, Tufve Nyholm, Tommy Löfstedt, Laura Mora Ballestar, Veronica Vilaplana, Hugh McHugh, Gonzalo Maso Talou, Alan Wang, Jay Patel, Ken Chang, Katharina Hoebel, Mishka Gidwani, Nishanth Arun, Sharut Gupta, Mehak Aggarwal, Praveer Singh, Elizabeth R. Gerstner, Jayashree Kalpathy-Cramer, Nicolas Boutry, Alexis Huard, Lasitha Vidyaratne, Md Monibor Rahman, Khan M. Iftekaruddin, Joseph Chazalon, Elodie Puybureau, Guillaume Tochon, Jun Ma, Mariano Cabezas, Xavier Llado, Arnau Oliver, Liliana Valencia, Sergi Valverde, Mehdi Amian, Mohammadreza Soltaninejad, Andriy Myronenko, Ali Hatamizadeh, Xue Feng, Quan Dou, Nicholas Tustison, Craig Meyer, Nisarg A. Shah, Sanjay Talbar, Marc-André Weber, Abhishek Mahajan, Andras Jakab, Roland Wiest, Hassan M. Fathallah-Shaykh, Arash Nazeri, Mikhail Milchenko, Daniel Marcus, Aikaterini Kotrotsou, Rivka Colen, John Freymann, Justin Kirby, Christos Davatzikos, Bjoern Menze, Spyridon Bakas, Yarin Gal, and Tal Arbel. QU-BraTS: MICCAI BraTS 2020 challenge on quantifying uncertainty in brain tumor segmentation — Analysis of ranking scores and benchmarking results. *Journal of Machine Learning for Biomedical Imaging (MELBA)*, 26:1–54, September 2022.

294. Tarek Menouer and Souheib Baarir. Parallel learning portfolio-based solvers. In *Proceedings of the International Conference on Computational Science (ICCS)*, pages 335–344, Zurich, Switzerland, June 2017.
295. Tarek Menouer and Souheib Baarir. Parallel satisfiability solver based on hybrid partitioning method. In *Proceedings of the 25th Euromicro International Conference on Parallel, Distributed and Network-based Processing (PDP)*, pages 54–60, St. Petersburg, Russia, March 2017.
296. Hakan Metin, Souheib Baarir, Maximilien Colange, and Fabrice Kordon. CDCLSym: Introducing effective symmetry breaking in SAT solving. In *Proceedings of the 24th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS’18)*, volume 10805 of *Lecture Notes in Computer Science*, pages 99–114, Thessaloniki, Greece, April 2018. Springer.
297. Thibaud Michaud and Alexandre Duret-Lutz. Practical stutter-invariance checks for ω -regular languages. In *Proceedings of the 22th International SPIN Symposium on Model Checking of Software (SPIN’15)*, volume 9232 of *Lecture Notes in Computer Science*, pages 84–101. Springer, August 2015. doi:10.1007/978-3-319-23404-5_7.
298. Thibaud Michaud and Maximilien Colange. Reactive synthesis from LTL specification with Spot. In *Proceedings of the 7th Workshop on Synthesis, SYNT@CAV 2018*, volume xx of *Electronic Proceedings in Theoretical Computer Science*, page xx, 2018.
299. Rodrigo Minetto, Nicolas Thome, Matthieu Cord, Jonathan Fabrizio, and Beatriz Marcotegui. SnooperText: A multiresolution system for text detection in complex visual scenes. In *Proceedings of the IEEE International Conference on Image Processing (ICIP)*, pages 3861–3864, Hong Kong, September 2010.
300. Maelle Moranges, Marc Plantevit, and Moustafa Bensafi. Using subgroup discovery to relate odor pleasantness and intensity to peripheral nervous system reactions. *IEEE Transactions on Affective Computing*, pages 1–16, May 2022. doi:10.1109/TAFFC.2022.3173403.
301. Baptiste Morel, Yongchao Xu, Alessio Virzi, Thierry Géraud, Catherine Adamsbaum, and Isabelle Bloch. A challenging issue: Detection of white matter hyperintensities in neonatal brain MRI. In *Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, pages 93–96, Orlando, Florida, USA, August 2016. doi:10.1109/EMBC.2016.7590648.
302. Minh Ôn Vũ Ngọc, Jonathan Fabrizio, and Thierry Géraud. Saliency-based detection of identity documents captured by smartphones. In *Proceedings of the IAPR International Workshop on Document Analysis Systems (DAS)*, pages 387–392, Vienna, Austria, April 2018. doi:10.1109/DAS.2018.17.
303. Minh Ôn Vũ Ngọc, Jonathan Fabrizio, and Thierry Géraud. Document detection in videos captured by smartphones using a saliency-based method. In *International Conference on Document Analysis and Recognition Workshops (ICDARW)*, volume 4, pages 19–24, Sydney, Australia, September 2019. IEEE. doi:10.1109/ICDARW.2019.30059.
304. Minh Ôn Vũ Ngọc, Nicolas Boutry, Jonathan Fabrizio, and Thierry Géraud. A new minimum barrier distance for multivariate images with applications to salient object detection, shortest path finding, and segmentation. *Computer Vision and Image Understanding*, 197–198, August 2020. doi:10.1016/j.cviu.2020.102993.
305. Minh Ôn Vũ Ngọc. *Improvement of a text detection chain and the proposition of a new evaluation protocol for text detection algorithms*. PhD thesis, Sorbonne Université, Paris, France, February 2020.
306. Minh Ôn Vũ Ngọc, Yizi Chen, Nicolas Boutry, Joseph Chazalon, Edwin Carlinet, Jonathan Fabrizio, Clément Mallet, and Thierry Géraud. Introducing the boundary-aware loss for deep image segmentation. In *Proceedings of the 32nd British Machine Vision Conference (BMVC)*, Online, 2021. https://www.bmvc2021-virtualconference.com/assets/papers/1546.pdf.

307. Minh Ôn Vũ Ngọc, Nicolas Boutry, and Jonathan Fabrizio. Topology-aware method to segment 3D plan tissue images. In *36th Conference on Neural Information Processing Systems, AI for Science Workshop*, 2022.
308. Minh Ôn Vũ Ngọc, Edwin Carlinet, Jonathan Fabrizio, and Thierry Géraud. The Dahu graph-cut for interactive segmentation on 2D/3D images. *Pattern Recognition*, 136(109207), April 2023. doi:[10.1016/j.patcog.2022.109207](https://doi.org/10.1016/j.patcog.2022.109207).
309. Laurent Najman and Thierry Géraud. Discrete set-valued continuity and interpolation. In C.L. Luengo Hendriks, G. Borgefors, and R. Strand, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 11th International Symposium on Mathematical Morphology (ISMM)*, volume 7883 of *Lecture Notes in Computer Science Series*, pages 37–48, Uppsala, Sweden, 2013. Springer.
310. Saeed Nejati, Ludovic Le Frioux, and Vijay Ganesh. A machine learning based splitting heuristic for divide-and-conquer solvers. In *Proceedings of the 26th International Conference on Principles and Practice of Constraint Programming (CP'20)*, volume 12333 of *Lecture Notes in Computer Science*, pages 899–916. Springer, Cham, September 2020.
311. Jim Newton. Finding maximal common joins in a DAG. Technical report, LRDE, Paris, France, November 2016.
312. Jim Newton, Akim Demaille, and Didier Verna. Type-checking of heterogeneous sequences in Common Lisp. In *European Lisp Symposium*, Kraków, Poland, May 2016.
313. Jim Newton. Monads in Common Lisp. Technical report, LRDE, Paris, France, November 2016.
314. Jim Newton. Efficient dynamic type checking of heterogeneous sequences. Technical Report 2005D002, LRDE, Paris, France, February 2016.
315. Jim Newton. Analysis of algorithms calculating the maximal disjoint decomposition of a set. Technical report, LRDE, Paris, France, January 2017.
316. Jim Newton, Didier Verna, and Maximilien Colange. Programmatic manipulation of Common Lisp type specifiers. In *European Lisp Symposium*, Brussels, Belgium, April 2017.
317. Jim Newton and Didier Verna. Approaches in typecase optimization. In *European Lisp Symposium*, Marbella, Spain, April 2018.
318. Jim Newton and Didier Verna. Recognizing heterogeneous sequences by rational type expression. In *Proceedings of the Meta'18: Workshop on Meta-Programming Techniques and Reflection*, Boston, MA USA, November 2018.
319. Jim Newton. *Representing and Computing with Types in Dynamically Typed Languages*. PhD thesis, Sorbonne Université, Paris, France, November 2018.
320. Jim Newton and Didier Verna. A theoretical and numerical analysis of the worst-case size of reduced ordered binary decision diagrams. *ACM Transactions on Computational Logic*, 20(1):1–36, January 2019.
321. Jim Newton and Didier Verna. Finite automata theory based optimization of conditional variable binding. In *European Lisp Symposium*, Genova, Italy, April 2019.
322. Jim Newton. Performance comparison of several folding strategies, February 2020. Accepted.
323. Jim Newton and Adrien Pommellet. A portable, simple, embeddable type system. In *Proceedings of the 14th European Lisp Symposium (ELS)*, pages 11–20, Online, May 2021. European Lisp Symposium. doi:[10.5281/zenodo.4709777](https://doi.org/10.5281/zenodo.4709777).
324. Jim Newton. Comparing use-cases of tree-fold vs fold-left, how to fold and color a map. In *Symposium on Implementation and Application of Functional Languages*, Copenhagen, Denmark, August 2022.
325. Olivier Ricou. *Données, Transparence et Démocratie*. AFNIL, May 2022. URL: <http://opendata.ricou.eu.org/>.

326. Emmanuel Paviot-Adet, Denis Poitrenaud, Etienne Renault, and Yann Thierry-Mieg. Ltl under reductions with weaker conditions than stutter invariance. In *Proceedings of the 41th IFIP International Conference on Formal Techniques for Distributed Objects, Components and Systems (FORTE'22)*, volume 13273 of *Lecture Notes in Computer Science*, pages 170–187. Springer, June 2022. doi:[10.1007/978-3-031-08679-3_11](https://doi.org/10.1007/978-3-031-08679-3_11).
327. Patrick Perrot, Réda Dehak, and Gérard Chollet. ENST-IRCGN system description. In *NIST SRE'06 Workshop: speaker recognition evaluation campaign*, San Juan, Puerto Rico, June 2006.
328. Denis Poitrenaud and Etienne Renault. Combining parallel emptiness checks with partial order reductions. In Yamine Ait Ameur and Shengchao Qin, editors, *Proceedings of the 21st International Conference on Formal Engineering Methods (ICFEM'19)*, volume 11852 of *Lecture Notes in Computer Science*, pages ??–??, Shenzhen, China, November 2019. Springer.
329. Adrien Pommellet and Tayssir Touili. LTL model checking for communicating concurrent programs. *Innovations in Systems and Software Engineering: a NASA journal (ISSE)*, 16(2):161–179, June 2020. doi:[10.1007/s11334-020-00363-6](https://doi.org/10.1007/s11334-020-00363-6).
330. Akim Demaille, Thomas Largillier, and Nicolas Pouillard. ESDF: A proposal for a more flexible SDF handling, May 2005. Communication to Stratego Users Day 2005.
331. Élodie Puybureau, Hugues Talbot, and Laurent Najman. Caractérisation des zones de mouvement périodiques pour applications bio-médicales. In *Actes du 26e Colloque GRETSI*, Juan-les-Pins, France, September 2017.
332. Élodie Puybureau, Hugues Talbot, and Laurent Najman. Periodic area-of-motion characterization for bio-medical applications. In *Proceedings of the IEEE International Symposium on Bio-Medical Imaging (ISBI)*, Melbourne, Australia, April 2017. doi:[10.1109/ISBI.2017.7950503](https://doi.org/10.1109/ISBI.2017.7950503).
333. Élodie Puybureau, Hugues Talbot, Noha Gaber, and Tarik Bourouina. Morphological analysis of brownian motion for physical measurements. In J. Angulo, S. Velasco-Forero, and F. Meyer, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 13th International Symposium on Mathematical Morphology (ISMM)*, volume 10225 of *Lecture Notes in Computer Science*, pages 486–497, Fontainebleau, France, May 2017. Springer. doi:[10.1007/978-3-319-57240-6_40](https://doi.org/10.1007/978-3-319-57240-6_40).
334. Élodie Puybureau, Guillaume Tochon, Joseph Chazalon, and Jonathan Fabrizio. Segmentation of gliomas and prediction of patient overall survival: A simple and fast procedure. In *Proceedings of the Workshop on Brain Lesions (BrainLes), in conjunction with MICCAI*, volume 11384 of *Lecture Notes in Computer Science*, pages 199–209. Springer, 2018. doi:[10.1007/978-3-030-11726-9_18](https://doi.org/10.1007/978-3-030-11726-9_18).
335. Diane Genest, Elodie Puybureau, Jean Cousty, Marc Leonard, Hugues Talbot, and Noemie De Croze. High throughput automated detection of axial malformations in fish embryo. Communication at the 5th International Symposium and Workshop on Fish and Amphibian Embryos as Alternative Models in Toxicology and Teratology, November 2018.
336. Élodie Puybureau and Thierry Géraud. Real-time document detection in smartphone videos. In *Proceedings of the 24th IEEE International Conference on Image Processing (ICIP)*, pages 1498–1502, Athens, Greece, October 2018. doi:[10.1109/ICIP.2018.8451533](https://doi.org/10.1109/ICIP.2018.8451533).
337. Élodie Puybureau, Yongchao Xu, Joseph Chazalon, Isabelle Bloch, and Thierry Géraud. Segmentation des hyperintensités de la matière blanche en quelques secondes à l’aide d’un réseau de neurones convolutif et de transfert d’apprentissage. In *Actes du congrès Reconnaissance des Formes, Image, Apprentissage et Perception (RFIAP), session spéciale “Deep Learning, deep in France”*, Marne-la-Vallée, France, June 2018.
338. Élodie Puybureau, Zhou Zhao, Younes Khoudli, Edwin Carlinet, Yongchao Xu, Jérôme Lacotte, and Thierry Géraud. Left atrial segmentation in a few seconds using fully convolutional network and transfer learning. In *Proceedings of the Workshop on Statistical*

- Atlases and Computational Modelling of the Heart (STACOM 2018)*, in conjunction with MICCAI, volume 11395 of *Lecture Notes in Computer Science*, pages 339–347. Springer, 2019. doi:10.1007/978-3-030-12029-0_37.
339. Diane Genest, Élodie Puybareau, Marc Léonard, Jean Cousty, Noémie De Crozé, and Hugues Talbot. High throughput automated detection of axial malformations in Medaka embryo. *Computers in Biology and Medicine*, 105:157–168, February 2019. doi:10.1016/j.combiomed.2018.12.016.
340. Élodie Puybareau, Edwin Carlinet, Alessandro Benfenati, and Hugues Talbot. Spherical fluorescent particle segmentation and tracking in 3D confocal microscopy. In *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 14th International Symposium on Mathematical Morphology (ISMM)*, Lecture Notes in Computer Science Series, pages 1–12, Saarbrücken, Germany, July 2019. Springer. doi:10.1007/978-3-030-20867-7_40.
341. Jimmy Francky Randrianasoa, Camille Kurtz, Éric Desjardin, and Nicolas Passat. AGAT: Building and evaluating binary partition trees for image segmentation. *SoftwareX*, 16(100855), December 2021. doi:10.1016/j.softx.2021.100855.
342. A. Raymond, B. Brument, and P. Parrend. VizNN: Visual data augmentation with convolutional neural networks for cybersecurity investigation. In *Upper-Rhine Artificial Intelligence Symposium*, October 2021. URL: <http://icube-publis.unistra.fr/4-RBP21>.
343. Yann Régis-Gianas and Raphaël Poss. On orthogonal specialization in C++: dealing with efficiency and algebraic abstraction in Vaucanson. In Jörg Striegnitz and Kei Davis, editors, *Proceedings of the Parallel/High-performance Object-Oriented Scientific Computing (POOSC; in conjunction with ECOOP)*, number FZJ-ZAM-IB-2003-09 in John von Neumann Institute for Computing (NIC), pages 71–82, Darmstadt, Germany, July 2003.
344. Youcef Remil, Anes Bendimerad, Marc Plantevit, Céline Robardet, and Mehdi Kaytoue. Découverte de sous-groupes de prédictions interprétables pour le triage d’incidents. In *Extraction et Gestion des Connaissances, EGC 2022, Blois, France, 24 au 28 janvier 2022*, pages 411–418, January 2022. In French. URL: <http://editions-rnti.fr/?inprocid=1002754>.
345. Etienne Renault, Alexandre Duret-Lutz, Fabrice Kordon, and Denis Poitrenaud. Three SCC-based emptiness checks for generalized Büchi automata. In Ken McMillan, Aart Middeldorp, and Andrei Voronkov, editors, *Proceedings of the 19th International Conference on Logic for Programming, Artificial Intelligence, and Reasoning (LPAR’13)*, volume 8312 of *Lecture Notes in Computer Science*, pages 668–682. Springer, December 2013. doi:10.1007/978-3-642-45221-5_44.
346. Etienne Renault, Alexandre Duret-Lutz, Fabrice Kordon, and Denis Poitrenaud. Strength-based decomposition of the property Büchi automaton for faster model checking. In Nir Piterman and Scott A. Smolka, editors, *Proceedings of the 19th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS’13)*, volume 7795 of *Lecture Notes in Computer Science*, pages 580–593. Springer, March 2013. doi:10.1007/978-3-642-36742-7_42.
347. Etienne Renault. *Contribution aux tests de vacuité pour le model checking explicite*. PhD thesis, Université Pierre et Marie Curie - Paris VI, Paris, France, December 2014.
348. Etienne Renault, Alexandre Duret-Lutz, Fabrice Kordon, and Denis Poitrenaud. Parallel explicit model checking for generalized Büchi automata. In Christel Baier and Cesare Tinelli, editors, *Proceedings of the 19th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS’15)*, volume 9035 of *Lecture Notes in Computer Science*, pages 613–627. Springer, April 2015. doi:10.1007/978-3-662-46681-0_56.
349. Etienne Renault, Alexandre Duret-Lutz, Fabrice Kordon, and Denis Poitrenaud. Variations on parallel explicit model checking for generalized Büchi automata. *International*

- Journal on Software Tools for Technology Transfer (STTT)*, 19(6):653–673, April 2017. First published online on 26 April 2016. doi:[10.1007/s10009-016-0422-5](https://doi.org/10.1007/s10009-016-0422-5).
350. Etienne Renault. Improving parallel state-space exploration using genetic algorithms. In Mohamed Faouzi Atig, Saddek Bensalem, Simon Bliudze, and Bruno Monsuez, editors, *Proceedings of the 12th International Conference on Verification and Evaluation of Computer and Communication Systems (VECOS'18)*, volume 11181 of *Lecture Notes in Computer Science*, pages 133–149, Grenoble, France, September 2018. Springer, Cham.
 351. Etienne Renault. Improving swarming using genetic algorithms. *Innovations in Systems and Software Engineering: a NASA journal (ISSE)*, 16(2):143–159, June 2020. doi:[10.1007/s11334-020-00362-7](https://doi.org/10.1007/s11334-020-00362-7).
 352. Alexandre Kirszenberg, Antoine Martin, Hugo Moreau, and Etienne Renault. Go2Pins: A framework for the LTL verification of Go programs (extended version). *International Journal on Software Tools for Technology Transfer (STTT)*, 2022.
 353. Florian Renkin, Alexandre Duret-Lutz, and Adrien Pommellet. Practical “paritizing” of Emerson–Lei automata. In *Proceedings of the 18th International Symposium on Automated Technology for Verification and Analysis (ATVA'20)*, volume 12302 of *Lecture Notes in Computer Science*, pages 127–143. Springer, October 2020. doi:[10.1007/978-3-030-59152-6_7](https://doi.org/10.1007/978-3-030-59152-6_7).
 354. Florian Renkin, Philipp Schlehuber-Caissier, Alexandre Duret-Lutz, and Adrien Pommellet. Effective reductions of Mealy machines. In *Proceedings of the 42nd International Conference on Formal Techniques for Distributed Objects, Components, and Systems (FORTE'22)*, volume 13273 of *Lecture Notes in Computer Science*, pages 114–130. Springer, June 2022. doi:[10.1007/978-3-031-08679-3_8](https://doi.org/10.1007/978-3-031-08679-3_8).
 355. Olivier Ricou, Anthony Baillard, Emmanuel Bertin, Frederic Magnard, Chiara Marmo, and Yannick Mellier. Web services at TERAPIX. In *Proceedings of the XVII conference on Astronomical Data Analysis Software & Systems (ADASS)*, September 2007.
 356. Olivier Ricou. 10 years of confrontation between French Internet users and their successive governments. In *Proceedings of the 7th European Conference on e-Government (ECEG)*, June 2007.
 357. Olivier Ricou. A survey of French local e-democracy. In *Proceedings of the 8th European Conference on e-Government (ECEG)*, July 2008.
 358. A. Abou Rida, P. Parrend, and R. Amhaz. Evaluation of anomaly detection for cybersecurity using inductive node embedding with convolutional graph neural networks. In *Complex Network 2021*, October 2021. URL: <http://icube-publis.unistra.fr/4-APA21>, doi:https://doi.org/10.1007/978-3-030-93413-2_47.
 359. A. Abou Rida, R. Amhaz, and P. Parrend. *Anomaly Detection on Static and Dynamic Graphs using Graph Convolutional Neural Networks*, page 23. Studies in Computational Intelligence Series. Springer, 2022. URL: <http://icube-publis.unistra.fr/1-AAP22>, doi:https://doi.org/10.1007/978-3-030-96737-6_12.
 360. Julie Rivet, Guillaume Tochon, Serge Meimon, Michel Paques, Michael Atlan, and Thierry Géraud. Motion compensation in digital holography for retinal imaging. In *Proceedings of the IEEE International Symposium on Biomedical Imaging (ISBI)*, pages 1428–1431, Venice, Italy, April 2019. doi:[10.1109/ISBI.2019.8759564](https://doi.org/10.1109/ISBI.2019.8759564).
 361. Julie Rivet, Guillaume Tochon, Serge Meimon, Michel Pâques, Thierry Géraud, and Michael Atlan. Deep neural networks for aberrations compensation in digital holographic imaging of the retina. In *Proceedings of the SPIE Conference on Adaptive Optics and Wavefront Control for Biological Systems V*, San Francisco, CA, USA, February 2019. doi:[10.1117/12.2509711](https://doi.org/10.1117/12.2509711).
 362. Julie Rivet. *Non-iterative methods for image improvement in digital holography of the retina*. PhD thesis, Sorbonne Université, Paris, France, July 2020.

363. Myriam Robert-Seidowsky, Jonathan Fabrizio, and Séverine Dubuisson. TextTrail: A robust text tracking algorithm in wild environments. In *Proceedings of the 10th International Conference on Computer Vision Theory and Applications (VISAPP)*, pages 268–276, March 2015. doi:10.5220/0005292002680276.
364. E. Royer, J. Chazalon, M. Rusiñol, and F. Bouchara. Benchmarking keypoint filtering approaches for document image matching. In *Proceedings of the 14th International Conference on Document Analysis and Recognition (ICDAR)*, pages 343–348, Kyoto, Japan, November 2017. doi:10.1109/ICDAR.2017.64.
365. Michaël Roynard, Edwin Carlinet, and Thierry Géraud. An image processing library in modern C++: Getting simplicity and efficiency with generic programming. In *Proceedings of the 2nd Workshop on Reproducible Research in Pattern Recognition (RRPR 2018)*, volume 11455 of *Lecture Notes in Computer Science*, pages 121–137, 2019. doi:10.1007/978-3-030-23987-9_12.
366. Michaël Roynard, Edwin Carlinet, and Thierry Géraud. A modern C++ point of View of programming in image processing. In *Proceedings of the 21st International Conference on Generative Programming: Concepts & Experiences (GPCE 2022)*, Auckland, New Zealand, December 2022. doi:10.1145/3564719.3568692.
367. Marçal Rusiñol, Joseph Chazalon, and Katerine Diaz-Chito. Augmented songbook: an augmented reality educational application for raising music awareness. *Multimedia Tools and Applications*, 77(11):13773–13798, June 2018. doi:10.1007/s11042-017-4991-4.
368. S. Saouli, S. Baarir, C. Dutheillet, and J. Devriendt. CosySEL: Improving SAT solving using local symmetries. In *24th International Conference on Verification, Model Checking, and Abstract Interpretation*, Boston, USA, January 2023. accepted.
369. Anjany Sekuboyina, Malek E. Hussein, Amirhossein Bayat, Maximilian Löffler, Hans Liebl, Hongwei Li, Giles Tetteh, Jan Kukačka, Christian Payer, Darko Stern, Martin Urschler, Maodong Chen, Dalong Cheng, Nikolas Lessmann, Yujin Hu, Tianfu Wang, Dong Yang, Daguang Xu, , Felix Ambellan, Tamaz Amiranashvili, Moritz Ehlke, Hans Lamecker, Sebastian Lehnert, Marilia Lirio, Nicolás Pérez de Olaguer, Heiko Ramm, Manish Sahu, Alexander Tack, Stefan Zachow, Tao Jiang, Xinjun Ma, Christoph Angerman, Xin Wang, Kevin Brown, Matthias Wolf, Alexandre Kirszenberg, Élodie Puybureau, Di Chen, Yiwei Bai, Brandon H. Rapazzo, Timyoas Yeah, Amber Zhang, Shangliang Xu, Feng Houa, Zhiqiang He, Chan Zeng, Zheng Xiangshang, Xu Liming, Tucker J. Netherton, Raymond P. Mumme, Laurence E. Court, Zixun Huang, Chenhang He, Li-Wen Wang, Sai Ho Ling, Lê Duy Huynh, Nicolas Boutry, Roman Jakubicek, Jiri Chmelik, Supriti Mulay, Mohanasankar Sivaprakasam, Johannes C. Paetzold, Suprosanna Shit, Ivan Ezhov, Benedikt Wiestler, Ben Glocker, Alexander Valentinitzsch, Markus Rempfler, Björn H. Menze, and Jan S. Kirschke. VerSe: A vertebrae labelling and segmentation benchmark for multi-detector CT images. *Medical Image Analysis*, 73(102166), July 2021. doi:10.1016/j.media.2021.102166.
370. M. Sennoussaoui, Najim Dehak, P. Kenny, Réda Dehak, and P. Dumouchel. First attempt at Boltzmann machines for speaker recognition. In *Odyssey Speaker and Language Recognition Workshop*, Singapore, June 2012.
371. Laurent Senta, Christopher Chedeau, and Didier Verna. Generic image processing with Climb. In *European Lisp Symposium*, Zadar, Croatia, May 2012. doi:10.5281/zenodo.3248934.
372. Tianyi Shi, Nicolas Boutry, Yongchao Xu, and Thierry Géraud. Local intensity order transformation for robust curvilinear object segmentation. *IEEE Transactions on Image Processing*, 31:2557–2569, March 2022. doi:10.1109/TIP.2022.3155954.
373. S. Shum, Najim Dehak, Réda Dehak, and J. Glass. Unsupervised methods for speaker diarization: An integrated and iterative approach. *IEEE Transactions on Audio, Speech, and Language Processing*, 21(10):2015–2028, October 2013.

374. Guillaume Tochon, Mauro Dalla Mura, Miguel-Angel Veganzones, Silvia Valero, Philippe Salembier, and Jocelyn Chanussot. Advances in utilization of hierarchical representations in remote sensing data analysis. In Shunling Liang, editor, *Comprehensive Remote Sensing, 1st Edition*, volume 2, chapter 5, pages 77–107. Elsevier, November 2017.
375. Guillaume Tochon, Jocelyn Chanussot, Mauro Dalla Mura, and Andrea Bertozzi. Object tracking by hierarchical decomposition of hyperspectral video sequences: Application to chemical gas plume tracking. *IEEE Transactions on Geoscience and Remote Sensing*, 55(8):4567–4585, August 2017. doi:[10.1109/TGRS.2017.2694159](https://doi.org/10.1109/TGRS.2017.2694159).
376. Guillaume Tochon, Mauro Dalla Mura, and Jocelyn Chanussot. Constructing a braid of partitions from hierarchies of partitions. In *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 14th International Symposium on Mathematical Morphology (ISMM)*, Lecture Notes in Computer Science Series, pages 1–12, Saarbrücken, Germany, July 2019. Springer. doi:[10.1007/978-3-030-20867-7_9](https://doi.org/10.1007/978-3-030-20867-7_9).
377. Guillaume Tochon, Mauro Dalla Mura, Miguel Angel Veganzones, Thierry Géraud, and Jocelyn Chanussot. Braids of partitions for the hierarchical representation and segmentation of multimodal images. *Pattern Recognition*, 95:162–172, November 2019.
378. Léonard Tschora, Erwan Pierre, Marc Plantevit, and Céline Robardet. Electricity price forecasting on the day-ahead market using machine learning. *Applied Energy*, 313(118752), May 2022. doi:[10.1016/j.apenergy.2022.118752](https://doi.org/10.1016/j.apenergy.2022.118752).
379. Léo Valais, Jim Newton, and Didier Verna. Implementing baker’s SUBTYPEP decision procedure. In *12th European Lisp Symposium*, Genova, Italy, April 2019.
380. Vincent Vallade, Ludovic Le Frioux, Souheib Baair, Julien Sopena, and Fabrice Kordon. On the usefulness of clause strengthening in parallel SAT solving. In *Proceedings of the 12th NASA Formal Methods Symposium (NFM’20)*, volume 12229 of *Lecture Notes in Computer Science*, pages 222–229. Springer, Cham, August 2020.
381. Vincent Vallade, Ludovic Le Frioux, Souheib Baair, Julien Sopena, Vijay Ganesh, and Fabrice Kordon. Community and LBD-based clause sharing policy for parallel SAT solving. In *Proceedings of the 23rd International Conference on Theory and Applications of Satisfiability Testing (SAT’20)*, volume 12178 of *Lecture Notes in Computer Science*, pages 11–27. Springer, Cham, June 2020.
382. V. Vallade, S. Nejati, J. Sopena, V. Ganesh, and S. Baair. Diversifying a parallel SAT solver with bayesian moment matching. In *Symposium on Dependable Software Engineering Theories, Tools and Applications*, Beijing, China, October 2022. doi:[10.1007/978-3-031-21213-0_14](https://doi.org/10.1007/978-3-031-21213-0_14).
383. The VAUCANSON group. Proposal: an XML representation for automata. Technical Report 0414, EPITA Research and Development Laboratory (LRDE), France, November 2004. URL: <http://www.lrde.epita.fr/cgi-bin/twiki/view/Publications/200414-TR>.
384. Didier Verna. Action recognition: how intelligent virtual environments can ease human-machine interaction. In *Proceedings of the 6th International Conference on Virtual Systems and MultiMedia (VSMM)—Intelligent Environments Workshop*, pages 703–713, Gifu, Japan, October 2000. IOS Press, USA.
385. Didier Verna. Virtual reality and tele-operation: a common framework. In *Proceedings of the 5th World Multi-Conference on Systemics, Cybernetics and Informatics (SCI)—Emergent Computing and Virtual Engineering*, volume 3, pages 499–504, Orlando, Florida, USA, July 2001.
386. Didier Verna. Beating C in scientific computing applications. In *Third European Lisp Workshop at ECOOP*, Nantes, France, July 2006. Best paper award.
387. Didier Verna. How to make lisp go faster than C. *IAENG International Journal of Computer Science*, 32(4), December 2006.

388. Didier Verna. How to make lisp go faster than C. In *Proceedings of the International MultiConference of Engineers and Computer Scientists*, Hong Kong, June 2006. International Association of Engineers.
389. Didier Verna. 2006(3), August 2006.
390. Didier Verna. CLOS solutions to binary methods. In *Proceedings of the International MultiConference of Engineers and Computer Scientists*, Hong Kong, March 2007. International Association of Engineers.
391. Didier Verna. Binary methods programming: the CLOS perspective. In *Proceedings of the First European Lisp Symposium*, pages 91–105, Bordeaux, France, May 2008. doi:[10.5281/zenodo.3248977](https://doi.org/10.5281/zenodo.3248977).
392. Didier Verna. Binary methods programming: the CLOS perspective (extended version). *Journal of Universal Computer Science*, 14(20):3389–3411, 2008. doi:[10.3217/jucs-014-20-3389](https://doi.org/10.3217/jucs-014-20-3389).
393. Didier Verna, Charlotte Herzeel, Christophe Rhodes, and Hans Hübner. Report on the 5th workshop ELW at ECOOP 2008. In Patrick Eugster, editor, *Object-Oriented Technology. ECOOP 2008 Workshop Reader*, volume 5475 of *Lecture Notes in Computer Science*, pages 1–6. Springer, July 2008.
394. Didier Verna. Revisiting the visitor: the just do it pattern. In *Proceedings of the ACCU Conference 2009*, Oxford, 2009.
395. Didier Verna. CLOS efficiency: Instantiation. In *Proceedings of the International Lisp Conference*, pages 76–90. Association of Lisp Users, March 2009.
396. Didier Verna. CLoX: Common Lisp objects for XEmacs. In *Proceedings of the 3rd European Lisp Symposium*, Lisbon, Portugal, May 2010. doi:[10.5281/zenodo.3248958](https://doi.org/10.5281/zenodo.3248958).
397. Didier Verna. Revisiting the visitor: the just do it pattern. *Journal of Universal Computer Science*, 16:246–271, 2010. doi:[10.3217/jucs-016-02-0246](https://doi.org/10.3217/jucs-016-02-0246).
398. Didier Verna. Classes, styles, conflicts: the biological realm of L^AT_EX. In Barbara Beeton and Karl Berry, editors, *TUGboat*, volume 31, pages 162–172, 2010.
399. Didier Verna. Biological realms in computer science: the way you don’t (want to) think about them. In *Onward! 2011*, pages 167–176, 2011. doi:[10.1145/2089131.2089140](https://doi.org/10.1145/2089131.2089140).
400. Didier Verna. Towards L^AT_EX coding standards. In Barbara Beeton and Karl Berry, editors, *TUGboat*, volume 32, pages 309–328, 2011.
401. Didier Verna. Extensible languages: blurring the distinction between DSLs and GPLs. In Marjan Mernik, editor, *Formal and Practical Aspects of Domain-Specific Languages: Recent Developments*, chapter 1. IGI Global, September 2012. doi:[10.4018/978-1-4666-2092-6.ch001](https://doi.org/10.4018/978-1-4666-2092-6.ch001).
402. Didier Verna. Star T_EX: the next generation. In Barbara Beeton and Karl Berry, editors, *TUGboat*, volume 33, 2012.
403. Didier Verna. The incredible tale of the author who didn’t want to do the publisher’s job. In Barbara Beeton and Karl Berry, editors, *TUGboat*, volume 34, 2013.
404. Didier Verna. TiCL: the prototype (Star T_EX: the next generation, season 2). In Barbara Beeton and Karl Berry, editors, *TUGboat*, volume 34, 2013.
405. Didier Verna and François Ripault. Context-oriented image processing. In *Context-Oriented Programming Workshop*, 2015. doi:[10.1145/2786545.2786547](https://doi.org/10.1145/2786545.2786547).
406. Didier Verna. Method combinators. In *11th European Lisp Symposium*, Marbella, Spain, April 2018. doi:[10.5281/zenodo.3247610](https://doi.org/10.5281/zenodo.3247610).
407. Didier Verna. Lisp, jazz, aikido. *The Art, Science and Engineering of Programming Journal*, 2(3), March 2018. doi:[10.22152/programming-journal.org/2018/2/10](https://doi.org/10.22152/programming-journal.org/2018/2/10).
408. Didier Verna. Parallelizing quickref. In *12th European Lisp Symposium*, pages 89–96, Genova, Italy, April 2019. doi:[10.5281/zenodo.2632534](https://doi.org/10.5281/zenodo.2632534).

409. Didier Verna. Quickref: Common Lisp reference documentation as a stress test for Texinfo. In Barbara Beeton and Karl Berry, editors, *TUGboat*, volume 40, pages 119–125. T_EX Users Group, T_EX Users Group, September 2019.
410. Didier Verna. *(Dynamic (Programming Paradigms)) ; ; Performance and Expressivity*. Habilitation thesis, Sorbone-Université, July 2020. doi:10.5281/zenodo.4244393.
411. Didier Verna. ETAP: Experimental typesetting algorithms platform. In *15th European Lisp Symposium*, Porto, Portugal, March 2022. doi:10.5281/zenodo.6334248.
412. Luca Veyrin-Forrer, Ataollah Kamal, Stefan Duffner, Marc Plantevit, and Céline Robardet. On GNN explainability with activation rules. *Data Mining and Knowledge Discovery*, pages 1–35, October 2022. doi:10.1007/s10618-022-00870-z.
413. Luca Veyrin-Forrer, Ataollah Kamal, Stefan Duffner, Marc Plantevit, and Céline Robardet. In pursuit of the hidden features of GNN’s internal representations. *Data & Knowledge Engineering*, 142:102097, November 2022. doi:10.1016/j.datak.2022.102097.
414. Luca Veyrin-Forrer, Ataollah Kamal, Stefan Duffner, Marc Plantevit, and Céline Robardet. Qu’est-ce que mon GNN capture vraiment ? Exploration des représentations internes d’un GNN. In *Extraction et Gestion des Connaissances, EGC 2022, Blois, France, 24 au 28 janvier 2022*, pages 159–170, January 2022. In French, Best paper award.
415. Luca Veyrin-Forrer, Ataollah Kamal, Stefan Duffner, Marc Plantevit, and Céline Robardet. What does my GNN really capture? On exploring internal gnn representations. In *International Joint Conference on Artificial Intelligence 2022*, pages 747–752. ijcai.org, July 2022. doi:https://doi.org/10.24963/ijcai.2022/105.
416. Li Wang, Dong Nie, Guannan Li, Élodie Puybureau, Jose Dolz, Qian Zhang, Fan Wang, Jing Xia, Zhengwang Wu, Jiawei Chen, Kim-Han Thung, Toan Duc Bui, Jitae Shin, Guodong Zeng, Guoyan Zheng, Vladimir S. Fonov, Andrew Doyle, Yongchao Xu, Pim Moeskops, Josien P.W. Pluim, Christian Desrosiers, Ismail Ben Ayed, Gerard Sanroma, Oualid M. Benkarim, Adrià Casamitjana, Verónica Vilaplana, Weili Lin, Gang Li, and Dinggang Shen. Benchmark on automatic 6-month-old infant brain segmentation algorithms: The iSeg-2017 challenge. *IEEE Transactions on Medical Imaging*, 38(9):2219–2230, September 2019. doi:10.1109/TMI.2019.2901712.
417. Nicolas Widynski, Thierry Géraud, and Damien Garcia. Speckle spot detection in ultrasound images: Application to speckle reduction and speckle tracking. In *Proceedings of the IEEE International Ultrasonics Symposium (IUS)*, pages 1734–1737, Chicago, IL, USA, 2014. doi:10.1109/ULTSYM.2014.0430.
418. Zhaohan Xiong, Qing Xia, Zhiqiang Hu, Ning Huang, Cheng Bian, Yefeng Zheng, Sulaiman Vesal, Nishant Ravikumar, Andreas Maier, Xin Yang, Pheng-Ann Heng, Dong Ni, Caizi Li, Qianqian Tong, Weixin Si, Élodie Puybureau, Younes Khoudli, Thierry Géraud, Chen Chen, Wenjia Bai, Daniel Rueckert, Lingchao Xu, Xiahai Zhuang, Xinzhe Luo, Shuman Jia, Maxime Sermesant, Yashu Liu, Kuanquan Wang, Davide Borra, Alessandro Masci, Cristiana Corsi, Coen de Vente, Mitko Veta, Rashed Karim, Chandrakanth Jayachandran Preetha, Sandy Engelhardt, Menyun Qiao, Yuanyuan Wang, Qian Tao, Marta Nunez-Garcia, Oscar Camara, Nicolo Savioli, Pablo Lamata, and Jichao Zhao. A global benchmark of algorithms for segmenting the left atrium from late gadolinium-enhanced cardiac magnetic resonance imaging. *Medical Image Analysis*, 67:101832, January 2021. doi:10.1016/j.media.2020.101832.
419. Yongchao Xu, Thierry Géraud, and Laurent Najman. Context-based energy estimator: Application to object segmentation on the tree of shapes. In *Proceedings of the 19th International Conference on Image Processing (ICIP)*, pages 1577–1580, Orlando, Florida, USA, October 2012. IEEE.
420. Yongchao Xu, Thierry Géraud, and Laurent Najman. Morphological filtering in shape spaces : Applications using tree-based image representations. In *Proceedings of the 21st International Conference on Pattern Recognition (ICPR)*, pages 485–488, Tsukuba Science City, Japan, November 2012. IEEE Computer Society.

421. Yongchao Xu, Thierry Géraud, and Laurent Najman. Salient level lines selection using the Mumford-Shah functional. In *Proceedings of the 20th International Conference on Image Processing (ICIP)*, pages 1227–1231, Melbourne, Australia, September 2013. IEEE.
422. Yongchao Xu, Thierry Géraud, and Laurent Najman. Two applications of shape-based morphology: blood vessels segmentation and a generalization of constrained connectivity. In C.L. Luengo Hendriks, G. Borgfors, and R. Strand, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 11th International Symposium on Mathematical Morphology (ISMM)*, volume 7883 of *Lecture Notes in Computer Science Series*, pages 390–401, Uppsala, Sweden, 2013. Springer.
423. Yongchao Xu. *Tree-based shape spaces: Definition and applications in image processing and computer vision*. PhD thesis, Université Paris-Est, Marne-la-Vallée, France, December 2013.
424. Yongchao Xu, Edwin Carlinet, Thierry Géraud, and Laurent Najman. Meaningful disjoint level lines selection. In *Proceedings of the 21st International Conference on Image Processing (ICIP)*, pages 2938–2942, Paris, France, 2014. doi:[10.1109/ICIP.2014.7025594](https://doi.org/10.1109/ICIP.2014.7025594).
425. Yongchao Xu, Thierry Géraud, Pascal Monasse, and Laurent Najman. Tree-based morse regions: A topological approach to local feature detection. *IEEE Transactions on Image Processing*, 23(12):5612–5625, December 2014. URL: [10.1109/TIP.2014.2364127](https://doi.org/10.1109/TIP.2014.2364127).
426. Yongchao Xu, Thierry Géraud, and Laurent Najman. Espaces des formes basés sur des arbres : définition et applications en traitement d’images et vision par ordinateur. In *Actes du 19ème Congrès National sur Reconnaissance des Formes et l’Intelligence Artificielle (RFIA)*, volume 1, Rouen, France, July 2014.
427. Yongchao Xu, Edwin Carlinet, Thierry Géraud, and Laurent Najman. Efficient computation of attributes and saliency maps on tree-based image representations. In J.A. Benediktsson, J. Chanussot, L. Najman, and H. Talbot, editors, *Mathematical Morphology and Its Application to Signal and Image Processing – Proceedings of the 12th International Symposium on Mathematical Morphology (ISMM)*, volume 9082 of *Lecture Notes in Computer Science Series*, pages 693–704, Reykjavik, Iceland, 2015. Springer. doi:[10.1007/978-3-319-18720-4_58](https://doi.org/10.1007/978-3-319-18720-4_58).
428. Yongchao Xu, Thierry Géraud, and Laurent Najman. Connected filtering on tree-based shape-spaces. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 38(6):1126–1140, June 2016. doi:[10.1109/TPAMI.2015.2441070](https://doi.org/10.1109/TPAMI.2015.2441070).
429. Yongchao Xu, Edwin Carlinet, Thierry Géraud, and Laurent Najman. Hierarchical segmentation using tree-based shape spaces. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 39(3):457–469, April 2017. doi:[10.1109/TPAMI.2016.2554550](https://doi.org/10.1109/TPAMI.2016.2554550).
430. Yongchao Xu, Thierry Géraud, and Laurent Najman. Hierarchical image simplification and segmentation based on Mumford-Shah-salient level line selection. *Pattern Recognition Letters*, 83(3):278–286, November 2016. doi:[10.1016/j.patrec.2016.05.006](https://doi.org/10.1016/j.patrec.2016.05.006).
431. Yongchao Xu, Thierry Géraud, and Isabelle Bloch. Segmentation d’IRM de cerveaux de nouveau-nés en quelques secondes à l’aide d’un réseau de neurones convolutif *pseudo-3d* et de transfert d’apprentissage. In *Actes du 26e Colloque GRETSI*, Juan-les-Pins, France, September 2017.
432. Yongchao Xu, Thierry Géraud, and Isabelle Bloch. From neonatal to adult brain MR image segmentation in a few seconds using 3D-like fully convolutional network and transfer learning. In *Proceedings of the 23rd IEEE International Conference on Image Processing (ICIP)*, pages 4417–4421, Beijing, China, September 2017. doi:[10.1109/ICIP.2017.8297117](https://doi.org/10.1109/ICIP.2017.8297117).
433. Yongchao Xu, Thierry Géraud, Élodie Puybureau, Isabelle Bloch, and Joseph Chazalon. White matter hyperintensities segmentation in a few seconds using fully convolutional network and transfer learning. In A. Crimi, S. Bakas, H. Kuijff, B. Menze, and M. Reyes, editors, *Brainlesion: Glioma, Multiple Sclerosis, Stroke and Traumatic Brain*

- Injuries— 3rd International Workshop, BrainLes 2017, Held in Conjunction with MICCAI 2017, Quebec City, QC, Canada, September 14 2017, Revised Selected Papers*, volume 10670 of *Lecture Notes in Computer Science*, pages 501–514. Springer, Cham, 2018. doi:[10.1007/978-3-319-75238-9_42](https://doi.org/10.1007/978-3-319-75238-9_42).
434. Yongchao Xu, Baptiste Morel, Sonia Dahdouh, Élodie Puybureau, Alessio Virzì, Hélène Urien, Thierry Géraud, Catherine Adamsbaum, and Isabelle Bloch. The challenge of cerebral magnetic resonance imaging in neonates: A new method using mathematical morphology for the segmentation of structures including diffuse excessive high signal intensities. *Medical Image Analysis*, 48:75–94, August 2018. doi:[10.1016/j.media.2018.05.003](https://doi.org/10.1016/j.media.2018.05.003).
435. Heru Xue, Thierry Géraud, and Alexandre Duret-Lutz. Multi-band segmentation using morphological clustering and fusion application to color image segmentation. In *Proceedings of the IEEE International Conference on Image Processing (ICIP)*, volume 1, pages 353–356, Barcelona, Spain, September 2003.
436. Erdem Yoruk, Ender Konukoglu, Bulent Sankur, and Jérôme Darbon. Person authentication based on hand shape. In *Proceedings of 12th European Signal Processing Conference (EUSIPCO)*, Vienna, Austria, September 2004.
437. Erdem Yörük, Ender Konukoglu, Bülent Sankur, and Jérôme Darbon. Shape-based hand recognition. *IEEE Transactions on Image Processing*, 15(7):1803–1815, July 2006.
438. Zhou Zhao, Nicolas Boutry, and Elodie Puybureau. Stacked and parallel U-nets with multi-output for myocardial pathology segmentation. In *Myocardial Pathology Segmentation Combining Multi-Sequence CMR Challenge*, volume 12554 of *Lecture Notes in Computer Science*, pages 138–145. Springer, 2020. doi:[10.1007/978-3-030-65651-5_13](https://doi.org/10.1007/978-3-030-65651-5_13).
439. Zhou Zhao, Nicolas Boutry, Élodie Puybureau, and Thierry Géraud. A two-stage temporal-like fully convolutional network framework for left ventricle segmentation and quantification on MR images. In Mihaela Pop, Maxime Sermesant, Oscar Camara, Xiahai Zhuang, Shuo Li, Alistair Young, Tommaso Mansi, and Avan Suinesiaputra, editors, *Statistical Atlases and Computational Models of the Heart. Multi-Sequence CMR Segmentation, CRT-EPiggy and LV Full Quantification Challenges—10th International Workshop, STACOM 2019, Held in Conjunction with MICCAI 2019, Shenzhen, China, October 13, 2019, Revised Selected Papers*, volume 12009 of *Lecture Notes in Computer Science*, pages 405–413. Springer, 2020. doi:[10.1007/978-3-030-39074-7_42](https://doi.org/10.1007/978-3-030-39074-7_42).
440. Zhou Zhao, Nicolas Boutry, Élodie Puybureau, and Thierry Géraud. FOANet: A focus of attention network with application to myocardium segmentation. In *Proceedings of the 25th International Conference on Pattern Recognition (ICPR)*, pages 1120–1127, Milan, Italy, January 2021. IEEE. doi:[10.1109/ICPR48806.2021.9412016](https://doi.org/10.1109/ICPR48806.2021.9412016).
441. Zhou Zhao, Nicolas Boutry, Élodie Puybureau, and Thierry Géraud. Do not treat boundaries and regions differently: An example on heart left atrial segmentation. In *Proceedings of the 25th International Conference on Pattern Recognition (ICPR)*, pages 7447–7453, Milan, Italy, January 2021. IEEE. doi:[10.1109/ICPR48806.2021.9412755](https://doi.org/10.1109/ICPR48806.2021.9412755).
442. Zhou Zhao and Zhenyu Lu. Multi-purpose tactile perception based on deep learning in a new tendon-driven optical tactile sensor. In *2022 IEEE/RSJ International Conference on Intelligent Robots and Systems*, Kyoto, Japan, October 2022. accepted.