Curriculum vitæ

Michel SALOMON

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Contact

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- ☞ **External links**

  - Personal FEMTO-ST website - http://members.femto-st.fr/michel-salomon/en
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  - ResearchGate

Academic position

- ☞ September 2002 - date → Associate professor in Computer Science at University Institute of Technology of Belfort-Montbéliard (IUT Belfort-Montbéliard), part of the University of Franche-Comté

Past-academic positions

- ☞ 2001 - 2002 → Full-time Temporary Teaching an Research Assistant (ATER) at Louis Pasteur University of Strasbourg, France
- ☞ 2000 - 2001 → Half-time Temporary Teaching an Research Assistant (ATER) at Louis Pasteur University of Strasbourg, France

Education

- ☞ Accreditation to supervise research (*Habilitation à Diriger des Recherches*) in Computer Science, Univ. Bourgogne Franche-Comté, France, 2018
- ☞ Ph.D. in Computer Science, Louis Pasteur University of Strasbourg, France, 2001

- ☞ Master of Advanced Studies (*Diplôme d'Études Approfondies et Maîtrise*) in Computer Science, Louis Pasteur University of Strasbourg, France, 1996
- ☞ Bachelor of Science (*Licence*) in Computer Science, Louis Pasteur University of Strasbourg, France, 1994

Institutional activities

- ☞ September 2011 - August 2014 → Head of the Computer Science Department at University Institute of Technology of Belfort-Montbéliard (IUT Belfort-Montbéliard)
- ☞ Since 2008 → Elected member of the Department Council (*Conseil de Département*), as teacher representative, during each academic year

Research activities

My research activities have entirely been carried out as a member of the AND team (*Algorithmique Numérique Distribuée*), a part of the DISC department (*Département Informatique des Systèmes Complexes*) which is the Computer Science department of FEMTO-ST Institute. Over the past 15 years I have worked on various topics, going back and forth between some of them:

- ☞ I begun to work on discrete dynamical systems and high performance computing;
- ☞ Then I investigated the use of optimization methods, first to improve the lifetime of Wireless Sensor Networks (WSNs) and second to predict the evolution of genomes in bioinformatics;
- ☞ Finally, I studied the use of artificial neural networks to solve different prediction and classification tasks. From 2008 up to 2012, the considered network architecture was the multilayer perceptron, while since 2015 I am interested in deep learning ones and Reservoir Computing.

Teaching activities

Since september 2002, I have mainly taught courses in Computer Architecture, Operating systems, and Networks at University Institute of Technology of Belfort-Montbéliard (IUT Belfort-Montbéliard) to students studying for a two-year university degree in technology (DUT) in Computer Science. Over the past five years, my teaching load was in average of 280.5 hours. In addition to these courses, I also give some lectures at Bachelor and Master levels and I supervise interns, in particular at the Master of Science level.

- ☞ Graduate courses taught at UFR STGI - University of Franche-Comté
  - Master 1st year in Computer Science - Analysis of multidimendional data and data mining
    In this course, an introduction on neural networks for classification and regressions tasks is made. More precisely, the great types of architectures, the training process, and so on, are described. In practice, the students implement first a perceptron and then a multilayer one, with in the first case an explicit coding of the complete training process, before using the framework Keras. The work on the perceptron allows to show the principle of the backpropagation process which is used to update the synaptic weights of the neuron.

- Master 2nd year in Computer Science - Several modules
  In the past years I have taught various courses. For example in 2004-2005 (at that time the degree was a DESS) I participated to a module in which I presented optimization techniques. More recently, I have presented the OMNeT++ simulator, a tools that is typically used to evaluate algorithms designed for Wireless Sensor Networks. Thus, in that case the students were expected to be able at the end of the course to implement an algorithm outlined in one of my publications.
  During academic year 2019-2020, I was in charge with a colleague of the Deep Learning module (I taught half of the hours). My courses were about architectures used for natural language processing (word embedding - Word2Vec, classification of texts), for classification and prediction of time series (using LSTM for example), and presented generative deep networks (AutoEncoder, Variational AE, and GANs). The lab sessions during which students wrote code were done using the popular Keras framework in Google Colab.

☞ Undergraduate courses taught at IUT Belfort-Montbéliard - University of Franche-Comté

- Bachelor of Science (*Licence professionnelle*)
  - Basics of programmation and Internet (for a diploma not in computer Science)
  - Security of computer systems
- Two-year university degree in technology (*DUT*)
  - Introduction to computer systems (1st year)
  - Computer network architectures (1st year)
  - Human machine interfaces (1st year)
  - Principles of operating systems (2nd year)
  - Network services (2nd year)
  - Information processing (2nd year)

Graduate supervision

☞ Co-supervision of 4 completed Ph.D. and four currently under supervision

- 2019.10 - 202X.Y / Ralph Karam - *in progress*
  Dissertation: "Automatic detection of business data anomalies with deep learning and application to the ADS-B protocol"
- 2019.04 - 202X.Y / Jérôme Meyer - *in progress*
  Dissertation: "Virtualization and automation of assembly line design"
- 2019.03 - 2022.Y / Jean-Marc Alkazzi - *in progress*
  Dissertation: "Towards Autonomous Factories with Multi-Agent Reinforcement Learning"
- 2018.10 - 202X.Y / Zhihao Chen - *in progress*
  Dissertation: "Deep learning for automatic detection and quantification of the disease areas of the myocardium from DE-MRI after myocardial infarction"
- 2012.12 - 2015.12 / Bassam Alkindy
  Dissertation: "Combining Approaches for Predicting Genomic Evolution"
  Placement: Assistant Professor at University of Mustansiriyah, Baghdad, Iraq

- 2012.09 - 2015.10 / Ali Khadum Idrees
  Dissertation: "Distributed Coverage Optimization Techniques for Improving Lifetime of Wireless Sensor Networks"
  Placement: Professor at University of Babylon, Iraq
- 2008.09 - 2011-09 / Rémy Laurent
  Dissertation: "Simulation du mouvement pulmonaire personnalisé par réseau de neurones artificiels pour la radiothérapie externe"
  Placement: Working in a private company
- 2003.09 - 2007.06 / Amine Abbas
  Dissertation: "Optimisation de la durée de vie d'un réseau de capteurs"
  Placement: Working in a private company

☞ Co-supervisor of 7 Master of Science internships

- 2018.02 - 2018.09 / David Roche
  Dissertation: "Deep learning pour la conception d'une intelligence artificielle pour un jeu abstrait"
- 2018.02 - 2018.08 / Pierre Feilles
  Dissertation: "Étude et mise en œuvre d'une approche de type deep learning pour segmenter automatiquement le myocarde"
- 2017.02 - 2017.09 / Pierre Primet
  Dissertation: "Étude et mise en œuvre d'une approche de type deep learning comme outil d'aide à la détection d'une pathologie"
- 2015.02 - 2015.09 / Nils Schaetti
  Dissertation: "Reservoir Computing : Étude théorique et pratique en reconnaissance de chiffres manuscrits"
  Placement: Ph.D. student at Computer Science department (IIUN) of the Université de Neuchâtel, Switzerland
- 2015.02 - 2015.09 / Jad Nassar
  Dissertation: "Parallelization of a Simulation Code for Neuromorphic Computing"
  Placement: was a Ph.D. student at INRIA FUN Team, Lille, until October 2018 when he defended his thesis
- 2010.02 - 2010.10 / Arnaud Aubert
  Dissertation: "Contrôle actif d'écoulements aérodynamiques par réseaux de neurones"
- 2003.02 - 2003.09 / Amine Abbas
  Dissertation: "Mixage synchronisme/asynchronisme dans les réseaux d'automates finis discrets"

External research funding

Over the past years I was involved in writing proposals for several calls, in particular calls for proposals from the French National Research Agency (ANR). Another important funding program for several projects in which I am involved is the ISITE-BFC program.

☞ ANR Calls for proposals

- Member of the ADOCMRI project which was submitted to the AAPG 2019 and 2020 call for proposals (a re-submission was motivated by the positive remarks of the experts)

  This project aims to design a system for the automatic detection of pathologies affecting the heart based on a set of cardiac images. The objective is also to assist the radiologist in writing his report. The pre-proposal of the project was retained in 2019 (first selection round) and thus an extended version was written in response to the experts' remarks. Unfortunately, in 2020 this project did not pass the first selection round.
- Member of the GeLeaD project which was successfully submitted to the 2018 Specific Support for Defence Research Projects and Innovation (ASTRID) program.

  This projects aims at detecting falsification attacks targeting the ADS-B protocol. ADS-B messages are unsecured messages send automatically by airplanes during their flight, such messages contain information on the airplane position, its speed, and so on.
- Coordinator of the APACHE project which was submitted to the 2013 Specific Support for Defence Research Projects and Innovation (ASTRID) program.

  The objective of this project was to design an approach using Acoustic PUFs (Physical Unclonable Functions) to Authenticate Computer Hardware and Electronics. APACHE was labelled by the Pole Véhicule du Futur, French Pôle de Compétitivité.
- Member of the JCJC (coordinated by a young researcher) MAPGEN project which was submitted to 2012 call for proposals.

  This project was planned to study mathematical and computing models able to simulate genome dynamics in evolution, taking into account gene mutations and genomic rearrangements.
- Member of the CrypSKOD project which was submitted to 2006 SETIN call.

  The CrypSKOD project, in which was involved the OPTICS Department of the FEMTO-ST Institute and the R2D2 team from the IRISA, was a research project intended to propose robust software and hardware cryptographic systems based on chaos.

☞ ISITE-BFC Calls for projects

- Member of the HoloNet project submitted to the Third ISITE-BFC call for proposals (Emergence projects) in September 2018. This latter was put on the waiting list project and is now under submission for funding by the AAP Region I-SITE 2020.
- Member of the ADVANCES project which was successfully submitted to the Second ISITE-BFC call for proposals (Industry Joint projects) in November 2017.

  The Automatic Detection of Viable myocArdiac segmeNts Considering dEep networkS (ADVANCES) project, which will have a three-year duration, has been awarded 309,000 euros in February 2018. The Ph.D. of Zhihao Chen is funded by this project.

☞ PRC (*Projets de Recherche Conjoints*) CNRS

- Coordinator for the french part of the SHOwCASe project submitted to the PRC CNRS-Royal Society 2018 call

  In this project we planned to develop a collaboration with colleagues of the De Montfort University Interdisciplinary Group in Intelligent Transport Systems (DIGITS) from Leicester (UK) on the smart scheduling of charging for autonomous electric vehicles. Unfortunately, this project has not been retained by the experts.

☞ Partnership Hubert Curien Polonium

- Member of the project called Spatio-temporal Short and Mid-term Wind Power Prediction using Deep Learning Approaches which was submitted to the PHC Polonium 2020 call.

Oral presentations

Over the three past years I made several talks, among which invited ones.

① Invited talk to present artificial neural networks at the Lebanese University in Beirut, Lebanon

"Artifical Neural Networks: from Theory to Applications". In *Seminar from Computer Science Department of the Faculty of Sciences II from the Lebanese University* organized in Fanar, April 11, 2019.

② Invited talk to popularize artificial intelligence and deep learning

"Intelligence Artificielle et Deep Learning : concepts et applications". In *Conférence "Quand le désir d'apprendre dope l'intelligence artificielle" de l'IDEE - Université populaire* organized in Belfort, October 15, 2019.

③ Invited talk to popularize research works (together with David Laiymani)

"Quelques travaux de recherche en IA / Deep-Learning au sein de FEMTO-ST". In *Sécu'RT 2019*, event organized by the département Réseaux et Télécoms de l'IUT Belfort-Montbéliard about artificial intelligence, March 14, 2019.

④ Invited talk to popularize artificial intelligence

"L'intelligence artificielle du point de vue de l'informatique". In *Conférence "Que vaut une intelligence artificielle face à un cerveau réel ?" de la Semaine du Cerveau* organized in Besançon, March 12, 2019.

⑤ Invited talk to popularize deep learning (together with Raphaël Couturier)

"Quand le deep learning dope l'intelligence artificielle". In *Conférence les clés du monde numérique* organized in Montbéliard, November 15, 2018.

⑥ Invited talk given to students of the Bachelor of Science in Computer Science

"Introduction à l'intelligence artificielle". In *Journée CMI R&D Day* organized by students in Besançon, Mars 21, 2018.

⑦ Contributed talk presenting our approach for image steganalysis

"Deux stéganalyseurs valent mieux qu'un (stéganalyseur)". In *CNRIUT 2017, Congrès National de la Recherche des IUT* organized by ADIUT in Auxerre, May 4-5, 2017.

⑧ Invited talk to present the research work on the use of deep learning for image steganalysis

"Deep learning for image steganalysis". In *Journées Scientifiques Equip@Meso* organized by Equip@Meso project in Grenoble (IMAG building), January 30-21, 2017.

⑨ Invited talk to present the research work on *Reservoir Computing*

"Parallelization and optimization of the neuromorphic simulation code. Applicationon the MNIST problem". In *Workshop Dynamical Systems and Brain-inspired Information Processing* organized by the Mathematical Laboratory of the University of Franche-Comté in Besançon, November 2-3, 2015.

Reviewing activities

My peer review contributions for academic journals can be tracked and verified on Publons website.

☞ Reviewer for international journals

- Expert Systems With Applications (IF Web of Science JCR 2018/2019: 5.891) in 2020
- IEEE Transactions on Neural Networks and Learning System (IF Web of Science JCR 2018/2019: 12.179) in 2020
- Applied Sciences in 2018, 2019, and 2020
- Journal of Supercomputing (IF Web of Science JCR 2016/2017: 1.326) in 2016, 2019, and 2020
- International Journal of Distributed Sensor Networks (IF Web of Science JCR 2017/2018: 1.787) in 2019
- Digital Signal Processing (IF Web of Science JCR 2016/2017: 2.241) in 2018
- Algorithms and Symmetry (SJR Q2 in Computer Science) both in 2018
- PLONS ONE (IF Web of Science JCR 2016/2017: 2.766) in 2018
- IEEE/ACM Transactions on Computational Biology and Bioinformatics (IF Web of Science JCR 2016/2017: 1.955) in 2018
- IEEE Journal of Microelectromechanical Systems (IF Web of Science JCR 2016/2017 2.124) in 2018
- Journal of Computational Science (IF Web of Science JCR 2016/17: 1.748) in 2015, 2016, 2017, and 2018
- Journal Engineering Applications of Artificial Intelligence (IF Web of Science JCR 2015: 2.368) in 2014
- Special issue of IEEE Computational Intelligence Magazine in 2012
  (Topic: Computational Intelligence in Computer Vision and Image Processing)

☞ Reviewer for international conferences

- IJCNN 2020, Int. Joint Conf. on Neural Networks, Glasgow, United Kingdom
- ICONIP 2019, Int. Conf. on Neural Information Processing, Sydney, Australia
- 3ICT 2019, Int. Conf. on Innovation and Intelligence for Informatics, Computing, and Technologies, Bahrain
- ICPMS 2019, 2^{nd} Int. Conf. on Physics, Mathematics and Statistics, Hangzhou, China
- MENACOMM 2019, IEEE Middle East North Africa COMMunications Conference, Manama, Bahrain
- SCS 2019, 2^{nd} Smart Cities Symposium, Bahrain
- MENACOMM 2018, IEEE Middle East North Africa COMMunications Conference, Jounieh, Lebanon
- MMSys 2018 (IoT and Smart Cities track), ACM Multimedia Systems Conference, Amsterdam, Netherlands
- ISPA 2017, 15^{th} IEEE International Symposium on Parallel and Distributed Processing with Applications, Guangzhou, China

- CSE 2016, 19^{th} IEEE Int. Conf. on Computational Science and Engineering, Paris, France
- ICANN 2009, 19^{th} International Conference on Artificial Neural Networks, Limassol, Cyprus
- LCN 2007, 32^{nd} IEEE Int. Conf. on Local Computer Networks, Dublin, Ireland

☞ Others

- Technical committee member of the "Colloque Les systèmes de santé apprenants de demain" organized by the GRIIS in Sherbrooke, May 6-7, 2020.

Publications

In the following list of publications, except [ACL-21] and [OS-2], only the ones issued from research works done since I became an assistant professor are listed. A publication with a star $*$ in superscript at the end of the authors' list means that they are given in alphabetical order. The journal impact factor given for publications in 2016 and 2017 are provided by the 2016/2017 JCR release. For the conferences, its *Conference Rank* that is used.

Peer reviewed international journals

[ACL-1] Christophe Guyeux, Michel Salomon, Bashar Al-Nuaimi, Bassam AlKindy, and Jean-François Couchot. "Ancestral Reconstruction and Investigation of Genomic Recombination on some Pentapetalae Chloroplasts". In: *Journal of Integrative Bioinformatics* 16.4 (2019). ISSN: 1613-4516. DOI: 10.1515/jib-2018-0057. SJR Q3 in Medicine.

[ACL-2] Régis Garnier et al. "Comparison of metaheuristics to measure gene effects on phylogenetic supports and topologies". In: *BMC Bioinformatics* 7 (2018). ISSN: 1471-2105. DOI: 10.1186/s12859-018-2172-8. IF Web of Science JCR 2.448, SJR Q1 in Computer Science Applications.

[ACL-3] Christophe Guyeux, Bashar Al-Nuaimi, Bassam AlKindy, Jean-François Couchot, and Michel Salomon. "On the reconstruction of the ancestral bacterial genomes in genus Mycobacterium and Brucella". In: *BMC Systems Biology* 12.5 (2018). ISSN: 1752-0509. DOI: 10.1186/s12918-018-0618-2. IF Web of Science JCR 2.303, SJR Q1 in Computer Science Applications.

[ACL-4] Ali Kadhum Idrees, Karine Deschinkel, Michel Salomon, and Raphaël Couturier. "Multiround Distributed Lifetime Coverage Optimization Protocol in Wireless Sensor Networks". In: *The Journal of Supercomputing* 74.5 (2018), pp. 1949–1972. ISSN: 1573-0484. DOI: 10.1007/s11227-017-2203-7. IF Web of Science JCR 1.326, SJR Q2 in Computer Science.

[ACL-5] Michel Salomon, Raphaël Couturier, Christophe Guyeux, Jean-François Couchot, and Jacques M. Bahi. "Steganalysis via a convolutional neural network using large convolution filters for embedding process with same stego key: A deep learning approach for telemedicine". In: *European Research in Telemedicine / La Recherche Européenne en Télémédecine* 6.2 (2017), pp. 79–92. ISSN: 2212-764X. DOI: 10.1016/j.eurtel.2017.06.001. SJR Q3 in Health Informatics.

[ACL-6] Ali Kadhum Idrees, Karine Deschinkel, Michel Salomon, and Raphaël Couturier. "Perimeter-based coverage optimization to improve lifetime in wireless sensor networks". In: *Engineering Optimization* 48.11 (2016), pp. 1951–1972. DOI: 10.1080/0305215X.2016.1145015. IF Web of Science JCR 1.728, SJR Q2 in Computer Science.

[ACL-7] Pierre-Emmanuel Leni et al. "Development of a 4D numerical chest phantom with customizable breathing". In: *Physica Medica: European Journal of Medical Physics* 32.6 (2016), pp. 795–800. DOI: 10.1016/j.ejmp.2016.05.004. IF Web of Science JCR 1.99, SJR Q2 in Radiology, Nuclear Medicine and Imaging.

[ACL-8] Ali Kadhum Idrees, Karine Deschinkel, Michel Salomon, and Raphaël Couturier. "Distributed lifetime coverage optimization protocol in wireless sensor networks". In: *The Journal of Supercomputing* 71.12 (2015), pp. 4578–4593. DOI: 10.1007/s11227-015-1558-x. IF Web of Science JCR 1.088, SJR Q2 in Computer Science.

[ACL-9] Julien Henriet, Pierre-Emmanuel Leni, Rémy Laurent, and Michel Salomon. "Case-Based Reasoning adaptation of numerical representations of human organs by interpolation". In: *Expert Systems with Applications* 41.2 (2014), pp. 260–266. DOI: 10.1016/j.eswa.2013.05.064. IF Web of Science JCR 2.981, SJR Q1 in Computer Science.

[ACL-10] Jean-François Couchot, Karine Deschinkel, and Michel Salomon*. "Active MEMS-based flow control using artificial neural network". In: *Mechatronics* 23.7 (2013), pp. 898–905. DOI: 10.1016/j.mechatronics.2013.02.010. IF Web of Science JCR 1.871, SJR Q1 in Computer Science.

[ACL-11] Julien Henriet et al. "EQUIVOX: An example of adaptation using an artificial neural network on a case-based reasoning platform". In: *Biomedical Engineering: Applications, Basis and Communications* 25.02 (2013), p. 1350027. DOI: 10.4015/S1016237213500270. IF Scopus 0.233, SJR Q4 in Bioengineering.

[ACL-12] Rémy Laurent, Pierre-Emmanuel Leni, Michel Salomon, Julien Henriet, and Régine Gschwind. "Integration of the lung motion into 3D phantoms". In: *Physica Medica: European Journal of Medical Physiscs* 29, Supplement 1 (2013), e25–. DOI: 10.1016/j.ejmp.2013.08.081. IF Web of Science JCR 1.763, SJR Q2 in Radiology, Nuclear Medicine and Imaging.

[ACL-13] Jacques M. Bahi, Nathalie Coté, Christophe Guyeux, and Michel Salomon*. "Protein folding in the 2D Hydrophobic–Hydrophilic (HP) square lattice model is chaotic". In: *Cognitive Computation* 4 (1 2012), pp. 98–114. DOI: 10.1007/s12559-011-9118-z. IF Web of Science JCR 1.933, SJR Q2 in Computer Science Applications.

[ACL-14] Jacques M. Bahi, Jean-François Couchot, Christophe Guyeux, and Michel Salomon*. "Neural networks and chaos: Construction, evaluation of chaotic networks, and prediction of chaos with multilayer feedforward networks". In: *Chaos: An Interdisciplinary Journal of Nonlinear Science* 22.1 (2012), p. 013122. DOI: 10.1063/1.3685524. IF Web of Science JCR 2.049, SJR Q2 in Applied Mathematics.

[ACL-15] Rémy Laurent, Régine Gschwind, Michel Salomon, Julien Henriet, and Libor Makovicka. "Perspective de la plate-forme NEMOSIS dans le cadre d´une réduction de doses en imagerie". In: *Radioprotection* 47.4 (2012), pp. 599–617. DOI: 10.1051/radiopro/2012030. IF Web of Science JCR 0.508, SJR Q3 in Nuclear Energy and Engineering.

[ACL-16] Rémy Laurent et al. "Data Processing using Artificial Neural Networks to Improve the Simulation of Lung Motion". In: *Biomedical Engineering: Applications, Basis and Communications (BME)* 24.06 (2012), pp. 563–571. DOI: 10.4015/S1016237212500524. IF Scopus 0.233, SJR Q4 in Bioengineering.

[ACL-17] Rémy Laurent et al. "Respiratory lung motion using an artificial neural network". In: *Neural Computing and Applications* 21.5 (2012), pp. 929–934. DOI: 10.1007/s00521-011-0727-y. IF Web of Science JCR 1.492, SJR Q2 in Artificial Intelligence.

[ACL-18] Jad Farah et al. "Development of a new CBR-based platform for human contamination emergency situations". In: 144.1-4 (2011), pp. 564–570. DOI: 10.1093/rpd/ncq440. IF Web of Science JCR 0.894, SJR Q3 in Radiology, Nuclear Medicine and Imaging.

[ACL-19] Jacques M. Bahi and Michel Salomon*. "A decentralized energy-based diffusion algorithm to increase the lifetime of MANETs". In: *Computer Networks* 54.16 (2010), pp. 2887–2898. DOI: 10.1016/j.comnet.2010.07.021. IF Web of Science JCR 1.446, SJR Q2 in Computer Networks and Communication.

[ACL-20] Jacques M. Bahi, Raphaël Couturier, Kamel Mazouzi, and Michel Salomon*. "Synchronous and asynchronous solution of a 3D transport model in a grid computing environment". In: *Applied Mathematical Modelling* 30.7 (2006), pp. 616–628. DOI: 10.1016/j.apm.2005.06.017. IF Web of Science JCR 2.291, SJR Q1 in Applied Mathematics and Modeling and Simulation.

[ACL-21] Michel Salomon, Fabrice Heitz, Guy-René Perrin, and Jean-Paul Armspach. "A massively parallel approach to deformable matching of 3D medical images via stochastic differential equations". In: *Parallel Computing* 31.1 (2005), pp. 45–71. DOI: 10.1016/j.parco.2004.12.003. IF Web of Science JCR 1.000, SJR Q2.

Peer reviewed national journals

[ACLN-1] Rémy Laurent et al. "Utilisation d'un réseau de neurones artificiels pour la simulation des mouvements pulmonaires". In: *Cancer/Radiothérapie* 15.2 (2011), pp. 123–129. DOI: 10.1016/j.canrad.2010.07.636.

[ACLN-2] Libor Makovicka et al. "Avenir des nouveaux concepts des calculs dosimétriques basés sur les méthodes de Monte Carlo". In: *Radioprotection* 44.1 (2009), pp. 77–88. DOI: 10.1051/radiopro/2008055.

[ACLN-3] Michel Salomon. "Parallélisation de l'évolution différentielle pour le recalage rigide d'images médicales volumiques". In: *Technique et Science Informatiques* 20.5 (2001), pp. 605–627.

Book chapter

[OS-1] Marc Sauget, Sylvain Contassot-Vivier, and Michel Salomon. "Parallelization of neural network building and training: an original decomposition method". In: *Advances in Mathematics Research*. Ed. by Albert R. Baswell. Vol. 17. Nova Publishers, 2012, pp. 193–223. URL: http://hal.inria.fr/hal-00643920/en.

[OS-2] Michel Salomon, Guy-René Perrin, Fabrice Heitz, and Jean-Paul Armspach. "Parallel differential evolution: application to 3-D medical image registration". In: *Differential Evolution*. Springer, 2005, pp. 353–411.

Peer reviewed international conferences with proceedings

[ACTI-1] Zhihao Chen et al. "Myocardial Infarction Segmentation From Late Gadolinium Enhancement MRI By Neural Networks and Prior Information". In: *International Joint Conf. on Neural Networks, IJCNN 2020, Glasgow, United Kingdom, July 19-24, 2020, Proceedings*. To appear. Rank A.

[ACTI-2] Ralph Karam, Michel Salomon, and Raphaël Couturier. "A Comparative Study of Deep Learning Architectures for Detection of Anomalous ADS-B Messages". In: *7th IEEE International Conference on Control, Decision and Information, CoDIT 2020, Prague, Czech Republic, June 29-July 2, 2020, Proceedings*. To appear.

[ACTI-3] Youssef Keryakos, Youssef Bou Issa, Abdallah Makhoul, and Michel Salomon. "Analyzing stress situations for blind people". In: *15th IEEE International Conference on Signal Image Technology & Internet Based Systems, SITIS 2019, Sorrento, Italy, November 26-29, 2019, Proceedings*. 2019, pp. 454–461.

[ACTI-4] Raphaël Couturier, Gilles Perrot, and Michel Salomon*. "Image Denoising using a Deep Encoder-Decoder Network with Skip Connections". In: *Neural Information Processing - 25th International Conference, ICONIP 2018, Siem Reap, Cambodia, December 13-16, 2018, Proceedings, Part VI, LNCS*. Ed. by L. Cheng et al. Vol. 11306. Springer International Publishing, 2018, pp. 554–565. DOI: 10.1007/978-3-030-04224-0_48. Rank A.

[ACTI-5] Jean-François Couchot, Raphaël Couturier, and Michel Salomon*. "Improving Blind Steganalysis in Spatial Domain using a Criterion to Choose the Appropriate Steganalyzer between CNN and SRM+EC". In: *ICT Systems Security and Privacy Protection: 32nd IFIP TC 11 International Conference, SEC 2017, Rome, Italy, May 29-31, 2017, Proceedings, IFIP Advances in Information and Communication Technology*. Ed. by Sabrina De Capitani di Vimercati and Fabio Martinelli. Vol. 502. Springer International Publishing, 2017, pp. 327–340. DOI: 10.1007/978-3-319-58469-0_22. Rank B.

[ACTI-6] Christophe Guyeux, Bashar Al-Nuaimi, Bassam AlKindy, Jean-François Couchot, and Michel Salomon. "On the ability to reconstruct ancestral genomes from mycobacterium genus". In: *Bioinformatics and Biomedical Engineering: 5th International Work-Conference, IWBBIO 2017, Granada, Spain, April 26–28, 2017, Proceedings, LNCS Part I*. Ed. by Ignacio Rojas and Francisco Ortuño. Vol. 10208. Cham: Springer International Publishing, 2017, pp. 642–658. DOI: 10.1007/978-3-319-56148-6_57.

[ACTI-7] Bashar Al-Nuaimi, Christophe Guyeux, Bassam Alkindy, Michel Salomon, and Jean-François Couchot. "Relation between Gene Content and Taxonomy in Chloroplasts". In: *International Journal of Bioscience, Biochemistry and Bioinformatics* 7 (1 2017). Selected papers of ICBSB 2016, pp. 41–50. DOI: 10.17706/ijbbb.2017.7.1.41-50.

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