

EMILIA TANTAR

CURRICULUM VITÆ

Interdisciplinary Center for Security, Reliability and Trust
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CURRENT POSITION

Since 10/2013 ▶ **Research Associate** in the NetLab team, Interdisciplinary Center for Security, Reliability and Trust. In charge with Carlo Bartocci (CREOS S.A.) of the SCADA security working group. Founder and promoter of the LuxInside (Security, Emulation and SDN) facility.

PROFESSIONAL AND ACADEMIC EXPERIENCE

2012-2013 ▶ **Research Associate , Machine Learning Team**, Luxembourg Center for Systems Biomedicine (LCSB), University of Luxembourg, Luxembourg. On maternity leave between September 2012 and January 2013.

2010-2012 ▶ **AFR-Marie Curie Postdoctoral Fellow** in the Computer Science and Communications Research Unit, University of Luxembourg.

2009-2010 ▶ **PostDoctoral Researcher** in the **Advanced Learning Evolutionary Algorithms (ALEA) Team**, INRIA Bordeaux - Sud-Ouest, Institut de Mathématiques de Bordeaux.

2007 - 2009 ▶ Lecturer (ATER), Polytech'Lille, Université des Sciences et Technologies de Lille, Lille, France.

EDUCATION

10/04/2009 ▶ **PhD in Computer Science** (French "Docteur en Informatique", mention "Très honorable"), Université Lille1, France. Research performed as member of INRIA Lille - Nord Europe and LIFL/CNRS UMR 8022 (Fundamental Computer Science Laboratory).
Subject : *Landscape analysis in multi-objective combinatorial optimization*

2005 ▶ **Master degree in Computer Science - Combinatorial Optimization**, Faculty of Computer Science, "Al. I. Cuza" University, Iasi, Romania. *GPA* : 9.83 (out of 10)

2003 ▶ **Bachelor of Science**, Faculty of Computer Science, "Al. I. Cuza" University, Iasi, Romania.
Graduation project : Active shape segmentation of C-arm images - 10(out of 10).
Advisors : Neculai Archip (University of British Columbia, Vancouver, Canada), Cornelius Croitoru

ACADEMIC RECOGNITION

- 2013 ▷ **Invited Expert (September, 2-6)** by the **Lorentz Center** to tackle unsolved issues in the area of *SIMCO - Set-Oriented and Indicator-Based Multi-Criteria Optimization* in the context of a one week working groups sessions, with peers.
- 2011 ▷ **Invited Professor (June-July)** - CINVESTAV-IPN (Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional), Mexico city, Mexico. In Prof. Carlos A. Coello Coello team. Invited departmental seminar.
- 2008 ▷ **INRIA "Explorateur" scholarship (October-December)** - Centrum Wiskunde & Informatica (CWI), Amsterdam, The Netherlands in the Computational Intelligence and Multi-agent Games (SEN4) group.
- 2008-2009 ▷ **Elected member of the LIFL council** (Fundamental Computer Science Laboratory, Lille, France) as one of the two PhD students' representatives (out of 90 students). **President** (March 2007 - November 2008) and **Founding Member of TILDA** - Computer Science PhD Students of Lille and Associated PhDs (Thesards en Informatique de Lille et Docteurs Associes), <http://tilda.univ-lille1.fr>
- 2007 ▷ **Invited researcher (May)** - Centro de Estudos de Gestao, Instituto Superior Tecnico, Lisbon, Portugal in the context of collaboration with Prof. Jose Rui Matos Figueira.
- 2005 ▷ INRIA Research Internship (*July to the end of August*), DOLPHIN Project Team, INRIA Lille-Nord Europe unit, Lille, France. Socrates/Erasmus European Research Mobility (*January to end of June*), LIFL (Fundamental Computer Science Laboratory), Lille, France (awarded for the 10 first ranked students of the Faculty of Computer Science, "Al. I. Cuza" University, Iasi, Romania).
- Invited seminars ▷ **Emilia Tantar**, Dynamic multi-objective optimization, **EVOLUTIONARY COMPUTING IN OPTIMIZATION AND DATA MINING (ECODAM)** summer school, University "A.I. Cuza", Iasi, Roumanie, 24-27 Juin, 2014.
 ▷ **Emilia Tantar**, Multi-objective particle methods and stochastic factors, **CINVESTAV - IPN Seminario Departamental**, Mexico city, Mexique, 29 June 2011.
 ▷ **Emilia Tantar**, Performance guarantees and landscape analysis for evolutionary multi-objective optimization, **Séminaires de l'équipe OPAL du Laboratoire IBISC**, Evry, France, 30 March 2010.
 ▷ **Emilia Tantar**, Landscape Analysis in Multi-objective Combinatorial Optimization, **SEN4 CWI Seminars**, Amsterdam, The Netherlands, 9 October 2008.

INDUSTRIAL COLLABORATIONS, PARTNERSHIPS

- CREOS S.A. ▷ **Security of SCADA systems**, SNT-CREOS working group coordinated jointly with Carlo Bartocci (CREOS S.A.). Lead to the development of a SCADA Emulation infrastructure in the SNT premises.
- IFREMER ▷ **Extreme Conditions Particle Based Simulation for Liquified Gas Tanks in Dunquerkue**, joint project between the Advanced Learning Evolutionary Algorithms (ALEA) - INRIA Bordeaux - Sud-Ouest / IMB and the Sea Exploration Research French Institute (IFREMER).
- CEA CESTA ▷ **Sparse Antenna Array Optimization**, French Atomic Energy Commission (CEA), project coordinated by Prof. Del Moral (Advanced Learning Evolutionary Algorithms, INRIA Bordeaux - Sud-Ouest / IMB) and Pierre Minvielle (CEA CESTA, Le Barp).
- International relations ▷ Computer Science representative in working groups and the delegation of the presidents and rectors of the University of the Greater Region (Kaiserslautren, Nancyc, Liege, Trier, Saarland, Luxembourg) aimed in establishing framework agreements with Bulgarian and Romanian universities.

AWARDS

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| 07/2007 | ▷ Best Paper Award <i>Convergence of stochastic search algorithms to gap-free pareto front approximations</i> , GECCO 2007, University College London, England. |
| 03/2004 | ▷ 1st prize - Emilia Tantar , <i>Active Segmentation of C-arm images</i> , StudIT (Students Communications Sessions), Timisoara, Romania. |

PUBLICATIONS

- | | |
|-------------------|--|
| Book | ▷ Emilia Tantar, Oliver Schutze , Performance guarantees and landscape analysis in multi-objective optimization, Springer Verlag, (to appear) |
| Book
chapter | <p>▷ Kuklinski, Slawomir; Wytrebowicz, Jacek; Dinh, Khoatruong; Tantar, Emilia, Application of Cognitive Techniques to Network Management and Control, in <i>EVOLVE - A Bridge between Probability, Set Oriented Numerics, and Evolutionary Computation V</i>, Tantar, Alexandru-Adrian; Tantar, Emilia; Sun, Jian-Qiao; Zhang, Wei; Ding, Qian; Schuetze, Oliver; Emmerich, Michael; Legrand, Pierrick; Del Moral, Pierre; Coello Coello, Carlos A. (Eds.), 2014.</p> <p>Tantar, Emilia; Palattella, Maria Rita; Avanesov, Tigran; Kantor, Mirosław; Engel, Thomas, Cognition : a tool for reinforcing security in Software Defined Networks, in <i>EVOLVE - A Bridge between Probability, Set Oriented Numerics, and Evolutionary Computation V</i>, Tantar, Alexandru-Adrian; Tantar, Emilia; Sun, Jian-Qiao; Zhang, Wei; Ding, Qian; Schuetze, Oliver; Emmerich, Michael; Legrand, Pierrick; Del Moral, Pierre; Coello Coello, Carlos A. (Eds.), 2014.</p> <p>Pierre Del Moral, Alexandru-Adrian Tantar, Emilia Tantar, On the Foundations and the Applications of Evolutionary Computing, <i>EVOLVE – A Bridge between Probability, Set Oriented Numerics and Evolutionary Computation</i>, Studies in Computational Intelligence, Springer, vol. 447, pp. 3–89, Springer Berlin Heidelberg, ISBN : 978-3-642-32725-4, 2013.</p> <p>Emilia Tantar, Alexandru-Adrian Tantar, Nouredine Melab, El-Ghazali Talbi, Landscape Analysis in Adaptive Metaheuristics for Grid Computing, in <i>Advances in Parallel Computing</i>, volume 17, Parallel Programming and Applications in Grid, P2P and Networked-based Systems, pp. 313-344, 2009, IOS Press Book Series, ISBN 978-1-60750-004-9.</p> |
| Journal
papers | <p>▷ Oliver Schetze, Marco Laumanns, Emilia Tantar, Carlos A. Coello Coello, El-Ghazali Talbi, Convergence of Stochastic Search Algorithms to Gap-Free Pareto Front Approximations, <i>Evolutionary Computation</i>, Volume 18, Issue 1, pp.65-96, MIT Press, Spring 2010.</p> <p>Pierre Minvielle, Emilia Tantar, Alexandru-Adrian Tantar, Philippe Berisset, Sparse Antenna Array Optimization with the Cross-Entropy Method, <i>IEEE Transactions on Antennas and Propagation</i>, Volume 59, Issue 8, pp. 2862-2871, IEEE Antennas and Propagation Society, August 2011.</p> |

- ▷ **Alexandru-Adrian Tantar, Emilia Tantar, and Oliver Schütze**, Asymmetric quadratic landscape approximation model. In Proceedings of the 2014 conference on Genetic and evolutionary computation (GECCO '14), Juillet 12-16, 2014, Vancouver, BC, Canada. ACM, New York, NY, USA, 493-500. DOI=10.1145/2576768.2598381 <http://doi.acm.org/10.1145/2576768.2598381>, 2014.

Z. Guede, A. Tantar, E. Tantar, P. Del Moral, Application of a particle filter-based subset simulation to the reliability assessment of a marine structure, 31th International Conference on Ocean, Offshore and Arctic Engineering, OMAE2012, Juillet 1-6, 2012, Rio de Janeiro, Brazil, 2012.

Emilia Tantar, Alexandru-Adrian Tantar, Pascal Bouvry, On dynamic multi-objective optimization - classification and performance measures, in Proceedings of the IEEE Congress on Evolutionary Computation (CEC 2011), New Orleans, USA, Juin 5-8, pp. 2759-2766, 2011.

Alexandru-Adrian Tantar, Emilia Tantar, Pascal Bouvry, A classification of dynamic multi-objective optimization, in Proceedings of Genetic and Evolutionary Computation Conference (GECCO Companion), Dublin, Ireland, July 12-16, pp. 105-106, 2011.

Emilia Tantar, *A priori* landscape analysis in Bi-Objective Combinatorial Optimization, in Proceedings of the The 6th European Conference on Intelligent Systems and Technologies (ECIT'2010), Iasi, Romania, October 7-9, pp. (to be announced), 2010.

Emilia Tantar, Clarisse Dhaenens, Jose Rui Figueira, El-Ghazali Talbi, *A priori* landscape analysis in guiding interactive multi-objective metaheuristics, in Proceedings of the IEEE Congress on Evolutionary Computation (CEC 2008), Hong Kong, China, June 1-7, pp. 4104-4111, 2008.

Oliver Schutze, Carlos A. Coello Coello, Emilia Tantar, El-Ghazali Talbi, Computing Finite Size Representations of the Set of Approximate Solutions of an MOP with Stochastic Search Algorithms, in *Proceedings of Genetic and Evolutionary Computation Conference (GECCO 2008)*, July 12-16, Atlanta, USA, pp. 713-720, ACM Press, 2008, ISBN 978-1-60558-131-6.

Emilia Tantar, Oliver Schutze, Jose Rui Figueira, Carlos A. Coello Coello, El-Ghazali Talbi, Computing and selecting epsilon-efficient solutions of 0,1-knapsack problems, in *Multiple Criteria Decision Making for Sustainable Energy and Transportation Systems (Proceedings of the 19th International Conference on Multiple Criteria Decision Making)*, Auckland, New Zealand, January 7-12, 2008, Lecture Notes in Economics and Mathematical Systems, pp.(to be announced), Volume 634, Springer, 2010, ISBN : 978-3-642-04044-3.

Best paper award - Oliver Schutze, Marco Laumanns, Emilia Tantar, Carlos A. Coello Coello, El-Ghazali Talbi, Convergence of Stochastic Search Algorithms to Gap-Free Pareto Front Approximations, in *Proceedings of Genetic and Evolutionary Computation Conference (GECCO 2007)*, July 7-11, University College London, England, pp. 892-901, ACM Press, 2007, ISBN 978-1-59593-697-4.

Emilia Tantar, Clarisse Dhaenens, El-Ghazali Talbi, Landscape Analysis for Multiobjective Combinatorial Optimization. Proceedings of SIAM Conference on Discrete Mathematics, University of Victoria, Victoria, British Columbia, Canada, June 25-28, 2006.

Emilia Tantar, Clarisse Dhaenens, El-Ghazali Talbi, Hyper-ellipse landscape approximation for large combinatorial optimization instances. Proceedings of ECCO XIX - CO, Porto, Portugal, May 11-13, 2006.

Emilia Tantar, Alexandru-Adrian Tantar, Image processing for planetary robots, European Mars and Planetary Conference (EMC), Iasi, Romania, July 26-28, 2004. Printed in Proceedings Mars and Planetary Science and Technology, published by European Mars Society and Performantica Press, edited by H.N. Teodorescu, pp. 75-89, 2004, ISBN 973-7994-83-3.

Emilia Tantar, Alexandru-Adrian Tantar, A Hybrid Approach for solving the job shop problem using a cumulative function, CD proceedings of the 8th International Symposium on Automatic Control and Computer Science (SACCS 2004), Iasi, Romania, October 22 - 23, 2004.

- National Conferences
- ▷ **Emilia Tantar, Clarisse Dhaenens, El-Ghazali Talbi**, Methodes interactives guidees par l'analyse du paysage en optimisation combinatoire bi-objectif, 9^{ème} congrès de la Societe Française de Recherche Operationnelle et d'Aide à la Decision, Clermont-Ferrand, France, February 25-27, 2008.
 - Emilia Tantar, Clarisse Dhaenens, El-Ghazali Talbi**, Sur l'approximabilite du problème de flow-shop de permutation bi-objectif. Conference conjointe FRANCORO V / ROADEF 2007, Grenoble, France, February 20-23, 2007.
 - Emilia Tantar, Alexandru-Adrian Tantar, Clarisse Dhaenens, El-Ghazali Talbi**, XMOS : plateforme generique pour l'optimisation multi-objectif, 7^{ème} congrès de la Societe Française de Recherche Operationnelle et d'Aide à la Decision (ROADEF), Lille, France, February 6-8, 2006.
- Workshops
- ▷ **Alexandru-Adrian Tantar, Emilia Tantar, Pascal Bouvry**, Load balancing for sustainable ICT, in Proceedings of Genetic and Evolutionary Computation Conference (GECCO Companion), GreenIT Evolutionary Computation Workshop, Dublin, Ireland, July 12-16, pp. 733-738, 2011.
 - Sébastien Varrette, Emilia Tantar, Pascal Bouvry**, On the Resilience of [distributed] Evolutionary Algorithms against Cheaters in Global Computing Platforms, in The 14th International Workshop on Nature Inspired Distributed Computing, part of the International Parallel and Distributed Processing Symposium (IPDPS), Anchorage (Alaska) USA, May 16-20, pp. 409-417, 2011.
 - Pierre Del Moral, Emilia Tantar, Alexandru-Adrian Tantar, Zakoua Guede**, Particle methods - simulation and calibration for extreme sea conditions, Rare Events Simulation Workshop (RES 2010), Bordeaux, France, October 28-29, 2010.
 - Emilia Tantar, Alexandru-Adrian Tantar, Clarisse Dhaenens, El-Ghazali Talbi**, XMOS - An eXact Multi-Objective Solver, Workshop International : Logistique & Transport 2006 (LT'2006), Hammamet, Tunisia, April 30-May 2, 2006.
 - 1st prize - Emilia Tantar**, Active Segmentation of C-arm images, StudIT (Students Communications Sessions), West University Timisoara, Timisoara, Romania, March 26-28, 2004.
- Research Reports
- ▷ **Alexandru-Adrian Tantar, Emilia Tantar, Pascal Bouvry**, Design and classification of dynamic multi-objective optimization problems, CoRR abs/1103.4820 : (2011).
 - F. Caron, P. Del Moral, A. Tantar, E. Tantar**, Simulation particulaire, Dimensionnement en conditions extrêmes. Report for the IFREMER research collaboration contract No. 2010-IFREMER-01 (92 pages), INRIA Bordeaux - Sud-Ouest, Bordeaux, 2010.
 - Emilia Tantar, Oliver Schutze, Jose Rui Figueira, Carlos A. Coello Coello, El-Ghazali Talbi**, Computing and Selecting ϵ -Efficient Solutions of 0,1-Knapsack Problems, Working Paper N. 14/2007, Centro de Estudos de Gestao, Instituto Superior Tecnico, Lisbon, Portugal.
 - Emilia Tantar, Clarisse Dhaenens, Jose Rui Figueira, El-Ghazali Talbi**, Interactive Hybridization of Metaheuristics and Landscape Analysis for Multi-Objective Optimization, ISSN 1646-2955, Working Paper N. 10/2007, Centro de Estudos de Gestao, Instituto Superior Tecnico, Lisbon, Portugal.

INVITED SEMINARS

- Invited seminars
- ▷ **Emilia Tantar**, Dynamic multi-objective optimization, **EVOLUTIONARY COMPUTING IN OPTIMIZATION AND DATA MINING (ECODAM)** summer school, Universiti£; "A.I. Cuza", Iasi, Roumanie, 24-27 Juin, 2014.
 - Emilia Tantar**, Multi-objective particle methods and stochastic factors, **CINVESTAV - IPN Seminario Departamental**, Mexico city, Mexique, 29 June 2011.
 - Emilia Tantar**, Performance guarantees and landscape analysis for evolutionary multi-objective optimization, **Séminaires de l'équipe OPAL du Laboratoire IBISC**, Evry, France, 30 March 2010.
 - Emilia Tantar**, Landscape Analysis in Multi-objective Combinatorial Optimization, **SEN4 CWI Seminars**, Amsterdam, The Netherlands, 9 October 2008.

SCIENTIFIC SERVICE

- Co-Founder and Co-Chair
- ▷ **EVOLVE International Conference - A bridge between probability, set oriented numerics and evolutionary computation**, <http://www.evolve-conference.org> (Iasi 2015, Beijing 2014, Leiden 2013, Mexico 2012, Luxembourg 2011, Bordeaux 2010)
- Editor
- ▷ 5 volumes in *Studies in Computational Intelligence series* (**Springer**) ; 1 volume in *Advances in Intelligent and Soft Computing* (**Springer**), 1 Special issue of the journal *Soft computing* (**Springer**)
- Research coordination
- ▷ 9 students for their Master thesis (4 currently PhD students).
- Reviewer
- ▷ **Soft Computing**, Springer
 - Journal of Optimization Theory and Applications**, Springer
 - Information Sciences**, Elsevier
 - Computers & Operations Research**, Elsevier
 - Applied Mathematics and Computation**, Elsevier
 - Computers and Mathematics with Applications**, Elsevier
 - Journal of Mathematical Modeling and Algorithms (JMMA)**, Special Issue on Recent Developments in Bioinspired Algorithms, 2010
 - European Journal of Operational Research (EJOR)**, Elsevier, Special Issue on Cooperative Combinatorial Optimization, Volume 199, Issue 3, December 2009
 - Journal of Heuristics**, Springer, Special Issue on Advances in Metaheuristics for Multiobjective Optimization, Volume 14, No. 4, August 2008
 - RAIRO - Operations Research**, EDP Sciences, Special Issue on Cooperative methods for Multiobjective Optimization, Volume 42, No. 1, January-March 2008
 - ISPDC 2008** - 7th International Symposium on Parallel and Distributed Computing.

- Scientific Committees
- ▷ IEEE Congress on Evolutionary Computation (**IEEE CEC 2013**), Cancun, Mexico, June 20-23, 2013.
 - IEEE Symposium Series on Computational Intelligence (**IEEE SSCI 2013**), Singapore, April 16-19, 2013.
 - 5th International Conference on Evolutionary Computation Theory and Applications (**ECTA 2013**), Vilamoura, Algarve, Portugal, September 20-22, 2013.
 - 2nd International Conference on Smart Grids and Green IT Systems 2012 (**SMARTGREENS**), Aachen, Germany, 9 - 10 May, 2013.
 - Understanding Problems Workshop, Genetic and Evolutionary Computation Conference, 2012 (**GECCO-UP**), 2012, Philadelphia, USA, 07 – 11 July, 2012.
 - IEEE Congress on Evolutionary Computation (**IEEE CEC 2012**) held as part of the 2012 IEEE World Congress on Computational Intelligence (IEEE WCCI), Brisbane, Australia, June 10-15, 2012.
 - 9th International Conference on Electrical Engineering, Computing Science and automatic Control (**CCE 2012**) Mexico City, September 26-28, 2012.
 - 4th International Conference on Evolutionary Computation Theory and Applications (**ECTA 2012**), Barcelona, Spain, October 5-7, 2012.
 - 1st International Conference on Smart Grids and Green IT Systems 2012 (**SMARTGREENS**), held in conjunction with CSEDU 2012, WEBIST 2012 and CLOSER 2012, Porto, Portugal, 19 - 20 April, 2012.
 - 8th International Conference on Electrical Engineering, Computing Science and Automatic Control (**CCE 2011**), Merida, Yucatan, Mexico, October 26-28, 2011.
 - International Conference on Evolutionary Computation Theory and Applications (**ECTA 2011**), Paris, France, October 24-26, 2011.
 - Sixth International Conference on P2P, Parallel, Grid, Cloud and Internet Computing (**3PGCIC 2011**), Global Optimization in Large Scale Distributed Systems Track, Barcelona, Spain, October 26-28, 2011.
 - IEEE SSCI'2011 : Symposium on Foundations of Computational Intelligence (FOCI 2011)**, Paris, France, April 11-15, 2011.
 - ICEC (International Conference on Evolutionary Computation)**, part of IJCCI (International Joint Conference on Computational Intelligence), Valencia, Spain, October 24-26, 2010.
 - The 6th European Conference on Intelligent Systems and Technologies**, Iasi, Romania, October 7-9, 2010.

EDITORIAL WORK

- Special Issue
- ▷ Evolutionary Computing & Complex Systems, *Soft Computing Journal* (A Fusion of Foundations, Methodologies and Applications / Computational Intelligence and Complexity), Tantar A., Tantar E. Bouvry P., Schütze O., Coello Coello C., Del Moral Pierre (Guest Editors), Di Nola A. (Editor-in-Chief), Loia V. (Co-Editor-in-Chief), 2012.
- Books
- ▷ EVOLVE – A bridge between Probability, Set Oriented Numerics and Evolutionary Computation, *Studies in Computational Intelligence*, Springer, Tantar E., Tantar A., Bouvry P., Del Moral P., Legrand P., Coello Coello C., Schütze O. (Editors), 2012.
 - ▷ EVOLVE II – A bridge between Probability, Set Oriented Numerics and Evolutionary Computation, *Advances in Intelligent and Soft Computing*, Springer, EVOLVE 2012 International Conference Proceedings, Schütze O., Coello Coello C., Tantar A., Tantar E., Bouvry P., Del Moral P., Legrand P. (Editors), 2013.
 - ▷ EVOLVE - A Bridge between Probability, Set Oriented Numerics, and Evolutionary Computation III, *Studies in Computational Intelligence*, Springer, Oliver Schütze, Carlos A. Coello Coello, Alexandru-Adrian Tantar, Emilia Tantar, Pascal Bouvry, Pierre Del Moral, Pierrick Legrand (Editors), ISBN : 978-3-319-01459-3, 2013.
 - ▷ EVOLVE - A Bridge between Probability, Set Oriented Numerics, and Evolutionary Computation IV, *Advances in Intelligent Systems and Computing*, Springer, Michael Emmerich, Andre Deutz, Oliver Schütze, Thomas Bäck, Emilia Tantar, Alexandru-Adrian Tantar, Pierre Del Moral, Pierrick Legrand, Pascal Bouvry, Carlos A. Coello (Editors), ISBN : 978-3-319-01127-1, 2013.

- ▷ EVOLVE - A Bridge between Probability, Set Oriented Numerics, and Evolutionary Computation V, *Advances in Intelligent Systems and Computing*, Springer, Alexandru-Adrian Tantar, Emilia Tantar, Jian-Qiao Sun, Wei Zhang, Qian Ding, Oliver Schütze, Michael Emmerich, Pierrick Legrand, Pierre Del Moral, Carlos A. Coello Coello (Editors), ISBN : 978-3-319-07493-1 (Print) 978-3-319-07494-8 (Online), 2014.
- Proceedings ▷ GECCO'11 : Proceedings of the 13th Annual Conference Companion on Genetic and Evolutionary Computation (GECCO), SIGEVO, ISBN : 978-1-4503-0690-4, Dublin, Ireland, 2011.

RESEARCH COORDINATION

- Working groups
- ▷ **November 2010-June 2012**, *GRIPHON Working Group (Grids, Parallel Computing, Ad-Hoc Networks and Optimization)*. Weekly event organized inside Prof. Pascal Bouvry's Team regrouping team members along with presentations given by invited researchers. Computer Science and Communications Research Unit, FSTC, University of Luxembourg, Luxembourg, <http://griphon.uni.lu>

September 2009-September 2010, Co-responsible of the ALEA (Advanced Learning and Evolutionary Algorithms) Working Group, held every Thursday from 14h, at Institut de Mathématiques de Bordeaux (IMB). The ALEA Working Group serves as a forum for the ALEA Team members and invited researchers. The event stands as a common ground for the group members and the invited speakers to present their ongoing research, interact and exchange knowledge. Each session is focused on the discussion and peer review of current and future projects, related aspects and incentive research topics. The event provides a regular schedule of presentations covering but not being restricted to ALEA's research themes.

Interactive Visual Cooperation of Methods (Cooperation visuelle interactive des méthodes), final year project, Herve DELANNOY and Karl BROQUET, 2nd year Master Pro IAGL, Sciences and Technology University of Lille (Université des Sciences et Technologies de Lille) - project supervised in collaboration with Prof. Clarisse Dhaenens.

- Student coordination
- ▷ *Dynamic Packet-size Optimization in MPEG Audio Streaming over Wireless LAN*, Master thesis research internship, Chinnapong ANG SUCHOTMETEE, 2nd year Master of Science Information Technology, University of Luxembourg, from King Mongkut's University of Technology Thonburi, Thailand - project supervised in collaboration with Dr. Alexandru-Adrian Tantar, March-April 2011(full-time).

Learning and anticipation techniques, part of *Carbon-neutral ICT Operations* at the University of Luxembourg, Cristina GHET and Diana MAROSIN, 1st year Master in Information and Computer Science, University of Luxembourg - project supervised in collaboration with Dr. Alexandru-Adrian Tantar, March-June 2011.

Dynamic sustainability procedures, part of *Carbon-neutral ICT Operations* at the University of Luxembourg, Mária SVORENOVA and Reyhan YILMAZ, 1st year Master in Information and Computer Science, University of Luxembourg - project supervised in collaboration with Dr. Alexandru-Adrian Tantar, March-June 2011.

Benchmarks for dynamic multi-objective optimization problems, Masoud TABATABEI and Vaishnavi REJENDRA, 1st year Master in Information and Computer Science, University of Luxembourg - project supervised in collaboration with Dr. Alexandru-Adrian Tantar, March-June 2011.

Interactive Visual Cooperation of Methods (Coopération visuelle interactive des méthodes), final year project, Herve DELANNOY and Karl BROQUET, 2nd year Master Pro IAGL, Sciences and Technology University of Lille (Université des Sciences et Technologies de Lille) - project supervised in collaboration with Prof. Clarisse Dhaenens.

TEACHING

- 2011
- ▷ **Advanced Optimization Techniques**, CSC Doctoral School, University of Luxembourg. Full responsibility for the organization, together with Dr. Alexandru-Adrian Tantar. The lectures given by Prof. Pierre Del Moral, Dr. Alexandru-Adrian Tantar and myself covered from the theoretical fundamentals to the practical aspects related to stochastic optimization techniques, distributed optimization and multi-objective optimization. I was in charge of Module 6 "Cooping with multi-objective optimization in a coherent way." The audience covered PhD students in computer science, mathematics and engineering, from the University of Luxembourg, but also from the University of the Greater Region, regrouping Saarland University, University of Liège, University of Luxembourg, The Universities of Lorraine, University of Kaiserslautern, University of Trier.
- 2006-2008
- ▷ **Fundamental Algorithmic Mathematics**, 1st year, Continuous Education, UFR IEEA (FIL) - Computer Science. Course notes preparation, specification of practical work topics, on-going evaluation and final exam evaluation.
- 2007-2009
- ▷ **Graph theory and Combinatorics**, 3rd year Software Engineering and Statistics (GIS), Polytech'Lille, with Prof. Clarisse DHAENENS - . Responsible for the seminar and the laboratory component module.
- Data structures**, 3rd year Software Engineering and Statistics (GIS), Polytech'Lille, with Prof. Anne eTIEN - practical work on implementing and using trees, queues, stacks, etc. (C based programming). Responsible for the laboratory component module and for the final laboratory evaluation.
- Computer programming in C**, 3rd year Computer Science - Microelectronics - Automation (IMA), Polytech'Lille, with Prof. Nathalie DEVESA and Prof. Franck SEYNHAVE (during two semesters) - initiation to the C programming language, basic concepts of data structures and algorithms. Responsible for the seminar, the laboratory component and for the final laboratory evaluation.
- Introduction to computer programming**, 3rd year Scientific Instrumentation and Applied Business (ITEC), Polytech'Lille, with Prof. Stephane JANOT - initiation to the C programming language, basic concepts of data structures and algorithms. Responsible for the laboratory component and for the final laboratory evaluation.
- ▷ **Algorithmics and computer programming**, 3rd year Software Engineering and Statistics (GIS), Polytech'Lille, with Prof. Clarisse DHAENENS. Tutoring students in learning the basics of computer programming and in developing algorithmic skills.
- Computer Science Project**, 3rd year Computer Science - Microelectronics - Automation (IMA), Polytech'Lille, with Prof. Nathalie DEVESA. Tutoring students in employing advanced data structures and in reinforcing algorithmic skills.
- 2006-2007
- ▷ **Algorithmics**, 2nd year , UFR IEEA (FIL) - Computer Science, with Prof. Franeois BOULIER. Seminars and practical work on linear programming, simplex, graphs and trees basic notions, graph walks, shortest path in a graph, etc.
- Data Structures and Algorithms**, 1st year, Technological Institute of Lille (IUT A, Lille 1) with Prof. Annie-Franeoise MOUYART. Practical work on implementing and using trees, queues, stacks, etc. (Java based programming).
- 2005-2006
- ▷ **Object Oriented Design**, 1st year, Technological Institute of Lille (IUT A, Lille 1), with Prof. Sebastien PICAULT - concepts of object oriented programming and design in Java. Intervened for the seminars and the practical part of the module, responsible for the final laboratory evaluation.
- Web Technologies**, 2nd year, UFR IEEA (FIL) - Computer Science, with Prof. Bruno BOGAERT - seminar materials preparation, final project evaluation and hands-on development using HTML/XHTML, CSS, PHP and MySQL.

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| 2004-2005 | <ul style="list-style-type: none"> ▷ Probability theory and statistics, 4th year, Faculty of Law, "Al.I. Cuza" University, Iasi, Romania, with Prof. Silvia LUCHIAN - initiation to the probability theory and statistical testing. Responsible for preparing laboratory materials and for the final laboratory evaluation, intervened for the seminars and practical part of the module. |
| 2003-2005 | <ul style="list-style-type: none"> ▷ Office tools, 1st year, Faculty of Computer Science, "Al.I. Cuza" University, Iasi, Romania, with Prof. Valentin CLOCOTICI - initiation to the use of office tools, preparing a presentation and basic Visual Basic programming. Responsible for the laboratory component and the final laboratory evaluation. |

LANGUAGE SKILLS

- ▷ English (fluent, proficient writing skills),
- ▷ French (fluent, proficient writing skills) ,
- ▷ Romanian (native).

HOBBIES

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| Visual
web design | <ul style="list-style-type: none"> ▷ Aeronautics, Arcade story computer games, Brain-teasers. ▷ 2nd prize for web design of the "Al. I. Cuza" University site, with Stefan Tanasa and Codrin Juravle, representing the WebGroup. |
| Essay,
poetry | <ul style="list-style-type: none"> ▷ 3rd prize for creativity during National Creation Camp, Galaciuc, Romania, 1995. |