

Raphaël BLEUSE

Curriculum Vitae (updated 2019-01-01)

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French and Swiss citizenships
Driving license

Education

2013–2017

Ph.D. in Computer Science, *DataMove team, LIG, Univ. Grenoble Alpes*, Grenoble, France.

“Apprehending heterogeneity at (very) large scale”.

Advisors: Grégory MOUNIÉ and Denis TRYSTRAM.

Committee: Lionel EYRAUD-DUBOIS, Nectarios KOZIRIS, Vitus J. LEUNG, Alix MUNIER, and Yves ROBERT.

2010–2013

Engineer’s degree, *Ensimag, Grenoble INP*, Grenoble, France.

Superior National School of Applied Mathematics and Computer Science.

Equivalent of a Master Degree of Science in Engineering, specialization in *Information Systems Engineering*.

Professional Experiences

2017

Research Associate, *PCOG team, FSTC, University of Luxembourg*, Luxembourg.

Coordination of the development of the ILNAS-UL Master “Smart Secure ICT for Business Innovation”.

2016–2017

Teaching Assistant, *IUT 2, Univ. Grenoble Alpes*, Grenoble, France.

50% teaching, 50% research.

Teaching

IUT 2, Univ. Grenoble Alpes, Grenoble, France (144 h)

2016–2017

Advanced Databases, lectures/tutorials/practicals, undergraduate, 20 h.

2016–2017

Computer Architecture and C Language, practicals, undergraduate, 16 h.

2016–2017

Distributed Programming, practicals, undergraduate, 24 h.

2016–2017

Introduction to Algorithms and Programming, lectures/tutorials/practicals, undergraduate, 24 h.

2016–2017

Introduction to Databases, lectures/tutorials/practicals, undergraduate, 30 h.

2016–2017

Principles of Operating Systems, tutorials/practicals, undergraduate, 30 h.

Ensimag, Grenoble INP, Grenoble, France (18 h)

2015–2016

Algorithms and Data structures, tutorials, undergraduate, 18 h.

Polytech, Univ. Grenoble Alpes, Grenoble, France (15 h)

2015–2016

Computers: Hardware and Software Architectures, tutorials, undergraduate, 15 h.

Esisar, Grenoble INP, Valence, France (130 h)

2013–2015

Communicating Applications, practicals, postgraduate, 12 h/year.

2013–2015

Distributed Programming, practicals, postgraduate, 21 h/year.

2013–2015

Introduction to Databases, tutorials/practicals, undergraduate, 18 h/year.

2013–2015

Network Architecture and Protocols, practicals, postgraduate, 14 h/year.

Students Supervision

2017

Marc-Alexandre OGANDAGA CAPITO, *Improving Visualization Techniques for Large Scale Traces*, M.Sc. student, MoSIG, Univ. Grenoble Alpes, Grenoble, France.

Co-supervision with Denis TRYSTRAM.

2016

Matthias KOHL, *Efficient Shapes for Tasks’ Allocation within Extreme Scale Computing Platform*, M.Sc student, MoSIG, Univ. Grenoble Alpes, Grenoble, France.



Co-supervision with Denis TRYSTRAM.

Other Activities

Refereeing

- international journals Concurrency and Computation: Practice and Experience; Parallel Computing; RAIRO-Operations Research.
- international conferences IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (**CCGRID**); International European Conference on Parallel and Distributed Computing (**Euro-Par**); International Workshop on Algorithms, Models and Tools for Parallel Computing on Heterogeneous Platforms (**HeteroPar**); International Symposium on Parallel and Distributed Computing (**ISPD**); International Symposium on Experimental Algorithms (**SEA**); International Conference on Software, Telecommunications and Computer Networks (**SoftCOM**).

Organizing committees

-  22nd International European Conference on Parallel and Distributed Computing (**Euro-Par 2016**), Grenoble, France.
-  11th Workshop on “New Challenges in Scheduling Theory”, Aussois, France.

Publications & Communications

International journals

- [J1] Raphaël BLEUSE et al. “Scheduling Independent Moldable Tasks on Multi-Cores with GPUs”. In: *IEEE Transactions on Parallel and Distributed Systems* 28.9 (Sept. 2017), pp. 2689–2702. DOI: 10.1109/TPDS.2017.2675891.
- [J2] Raphaël BLEUSE et al. “Scheduling independent tasks on multi-cores with GPU accelerators”. In: *Concurrency and Computation: Practice and Experience* 27.6 (2015), pp. 1625–1638. DOI: 10.1002/cpe.3359.

International conferences

- [C1] Maya OLSZEWSKI et al. “Visualizing the Template of a Chaotic Attractor”. In: *Graph Drawing*. Vol. 11282. Lecture Notes in Computer Science. Springer, Sept. 2018, pp. 106–119. DOI: 10.1007/978-3-030-04414-5_8.
- [C2] Raphaël BLEUSE et al. “Interference-Aware Scheduling using Geometric Constraints”. In: *Euro-Par*. Vol. 11014. Lecture Notes in Computer Science. Springer, Aug. 2018, pp. 205–217. DOI: 10.1007/978-3-319-96983-1_15.
- [C3] Raphaël BLEUSE, Giorgio LUCARELLI, and Denis TRYSTRAM. “A Methodology for Handling Data Movements by Anticipation: Position Paper”. In: *Euro-Par Workshops*. Vol. 11339. Lecture Notes in Computer Science. Springer, Aug. 2018, pp. 134–145. DOI: 10.1007/978-3-030-10549-5_11.
- [C4] Raphaël BLEUSE et al. “Scheduling Data Flow Program in XKaapi: A New Affinity Based Algorithm for Heterogeneous Architectures”. In: *Euro-Par*. Vol. 8632. Lecture Notes in Computer Science. Springer, Aug. 2014, pp. 560–571. DOI: 10.1007/978-3-319-09873-9_47.

International conferences (abstract)

- [C1] Raphaël BLEUSE et al. “Interference-Aware Scheduling with 2D-Torus as a Case Study”. Presented at *ECCO XXX*. Koper, Slovenia, May 2017.
- [C2] Raphaël BLEUSE, Giorgio LUCARELLI, and Denis TRYSTRAM. “Convex Allocations under IO Constraints”. Presented at the *5th JLESC Workshop*. Lyon, France, June 2016.
- [C3] Raphaël BLEUSE, Giorgio LUCARELLI, and Denis TRYSTRAM. “Convex Allocations under IO Constraints”. Presented at *New Challenges in Scheduling Theory*. Aussois, France, Mar. 2016.
- [C4] Raphaël BLEUSE. “Affinity Scheduling: from Quantitative to Qualitative”. Presented at the *2nd JLESC Workshop*. Chicago, USA, Nov. 2014.

Theses

- [T1] Raphaël BLEUSE. “Apprehending heterogeneity at (very) large scale”. PhD thesis. LIG, Univ. Grenoble Alpes, Grenoble, France, Oct. 2017.
- [T2] Raphaël BLEUSE. “Utilisation efficace des accélérateurs GPU – Ordonnancement sur machines hybrides”. MA thesis. Ensimag, Grenoble INP, Grenoble, France, June 2013.

Languages

- French mother tongue
- English fluent (*TOEFL iBT 103/120*)