Associate Professor

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Mother of two girls, born in March 2012 and September 2014.

Professional experience and education

- Sept. 2005-Present: Associate Professor, LIP, École Normale Supérieure de Lyon, France. Roma project: *Resource Optimization: Models, Algorithms, and scheduling.*
- Aug. 2017-2018: Visiting Associate Prof. at Georgia Inst. of Technology, Atlanta, USA.
- Oct. 2009-2014: Junior member of the Institut Universitaire de France.
- July 2009: "Habilitation à Diriger des Recherches" at École Normale Supérieure de Lyon, France, entitled Scheduling pipelined applications: models, algorithms and complexity.
- Sept. 2003-Aug. 2005: Research Assistant, School of Informatics, University of Edinburgh, Scotland. Enhance project: Enhancing the Performance Predictability of Grid Applications with Patterns and Process Algebras, with Murray Cole, Jane Hillston and Stephen Gilmore.
- Oct. 2000-Sept. 2003: PhD in Computer science: Systems and Communications in the Institut National Polytechnique de Grenoble, defended the 18th June 2003, entitled *Methods and algorithms for the performance evaluation of systems with a large state space*. Supervisor: Brigitte Plateau (ID-IMAG laboratory, Grenoble, France).
- 1999-2000: "Diplôme d'Etudes approfondies" (DEA) of Computer science: Systems and Communication (prerequisite for the Ph.D); passed with "Excellent"; University Joseph Fourier, Grenoble, France. **DEA (master) project**, ID-IMAG laboratory, under the supervision of Jacques Chassin de Kergommeaux: *Study of interactions between the Athapascan-0 tracing tool and the traced applications.*
- 1997-2000: École Nationale Supérieure d'Informatique et de Mathématiques Appliquées de Grenoble (ENSIMAG), INPG, Grenoble, France. Equivalent to a Master's Degree in Computer Science, Emphasis in Systems and Networks; passed with "Excellent". Summer 1999: 8 weeks training period at Caltech (California Institute of Technology), Pasadena, USA. Summer 1998: 6 weeks training period at IRAM (Institute for Research in Millimeter Astronomy), Grenoble, France.

Research projects

- 2016-2018: Principal investigator of the Keystone Inria Associate Team with Vanderbilt University, USA, on "Scheduling algorithms for sparse linear algebra at extreme scale".
- 2015-2018: Member of the ELCI project, a French software project that brings together academic and industrial partners to provide a software environment for the next HPC systems.
- 2011-2015: Member of the Rescue ANR project: "Resilience for exascale scientific computing".
- 2009-2010: Responsible of the Lyon partner in the ALEAE ARC INRIA project: "Handling uncertainties in large-scale distributed systems".
- 2008-2010: Co-project investigator of the StochaGrid ANR project: design of new stochastic models that will allow for an accurate prediction of the performance of workflow applications on grid computing platforms, and new scheduling algorithms.
- **2007-2009:** Project leader of the **SchedLife** CNRS/USA project: "Symbiotic scheduling of biological grid applications".
- 2006-2009: Member of the Alpage ANR project: "Algorithms for large-scale platforms".
- 2004-2008: Member of CoreGRID, European Network of Excellence.
- **2003-2005**: Research assistant as part of the **Enhance** project: "Enhancing the performance predictability of grid applications with patterns and process algebras".
- 2002-2003: DECORE IMAG-ELESA project: task coordinator "Exploiting the symmetries in communication network models".

Teaching responsibilities

- Sept. 2018-Present: Responsible of 3rd year computer science students at ENS Lyon (École Normale Supérieure de Lyon, France).
- Sept. 2015-2017: Responsible of the Master of Computer Science at ENS Lyon.
- Sept. 2006-2010: Responsible of 3rd year computer science students at ENS Lyon.

Teaching

- Sept. 2005-Present: Teaching algorithms, parallel algorithms, systems and networks, algorithms for networks and telecommunications, and resilient and energy-aware scheduling algorithms at ENS Lyon, and tutoring students, 192 hours per year (64h from 2009 to 2014 due to IUF position, and 96h in 2014/2015 due to maternity leave).
- 2017-2018: Teaching algorithms at Georgia Institute of Technology, Atlanta, USA.
- 2004-2005: Tutoring on an Enterprise Computing course at the University of Edinburgh.
- Oct. 2000-Sept. 2003: Gave computer science lectures at ESISAR (INPG, Valence, France) and at ENSIMAG (INPG, Grenoble, France): algorithms, compilation, performance evaluation.

Research and professional service

- 47 papers in international journals, 92 papers in international conferences (all my publications are available at graal.ens-lyon.fr/~abenoit/).
- Students: 3 post-doctoral students, and 9 PhD students, with 7 thesis already defended and 2 on-going PhD students.
- Associate Editor (in Chief) of ParCo (Parallel Computing), since 2018; Member of the Editorial Board (Associate Editor) of TPDS, IEEE Transactions on Parallel and Distributed Systems (2015-Present); of JPDC, the Journal of Parallel and Distributed Computing (2011-2018); and of SUSCOM, the Journal of Sustainable Computing (2013-2017).
- Steering committees: Member of the steering committee of IPDPS and HCW since 2019.
- Conference chairing: Global chair for *Scheduling and Load Balancing* topic of EuroPar 2018, Program chair of IPDPS 2018; Technical papers chair of SC 2017; Program chair of ICPP 2017; Program chair of HiPC 2016; Program vice-chair of SC 2016, Algorithms track; Program vice-chair of HiPC 2015, Algorithms track; Program vice-chair of SBAC-PAD 2015, Applications and Algorithms track; Program vice-chair of IPDPS 2014, Algorithms track; Workshops co-chair of ICPP 2016, 2015, 2014 and 2013; Program vice co-chair of IEEE Cluster 2012; Program vice-chair of AINA 2012; Member of the organizing committee of SIAM PP 2012; Program chair of the HCW 2010 workshop, and general chair of HCW 2011 (in conjunction with IPDPS); co-organizing the workshop "Scheduling for large-scale systems" 2009; co-organizing the PAPP workshops, co-located with ICCS, from 2010 to 2006.
- Conference program committees: PC member for IPDPS 2019 to 2016; SC 2019-2015; ESA 2019; HCW 2015 to 2013; CCGrid 2015 to 2012; Ena-HPC 2015-2014; FEEDBACK 2015; PDP 2014; ICPP 2013; IGCC 2013; ICPE 2013; CLOSER 2013; IPDPS 2013 to 2010 and 2008; HPDC 2012; HiPC 2013-2011-2010; SPAA 2011; ICCS 2010 to 2005; APDCM 2010; HPCC 2009; ISPDC 2009; ISCIS 2009; TCPP PhD Forum 2009; SBAC-PAD 2008.
- Reviewing: Reviewer of several international journals, such as CCPE, DAM, FGCS, IJCS, IJFCS, IJHPCA, ITOR, JPDC, JPEDS, JSS, Parco, PPL, SUSCOM, TODS, TPDS, TSE. Reviewer of several conferences and workshops, such as APDCM, CC, CCGrid, CLOSER, CMPP, DAC, ESA, EuroPar, HCW, HiPC, HLPP, HPCC, HPDC, ICCS, ICDCS, ICPADS, ICPE, ICPP, IPDPS, ISCIS, ISPDC, MAM, NSMC, PAPP, PNPM, SBAC-PAD, SC, SPAA, STACS.
- Other: Member and reviewer for PhD committees; Member of committees to recruit associate professors and researchers in France and abroad; Expert for the European Commission to evaluate proposals and projects.

Awards

- 2019: IEEE TPDS Award for Editorial Excellence to recognize exceptional contributions by members of the TPDS Editorial Board.
- 2015-Present, and 2007-2011: Prime d'encadrement doctoral et de recherche.
- June 2010: I became a Senior Member of the IEEE.
- 2005: Outstanding thesis award by the Institut National Polytechnique de Grenoble for my PhD thesis.