CURRICULUM VITAE

Loris MARCHAL

Laboratoire de l’Informatique du Parallelisme
Ecole Normale Superieure de Lyon
46 allee d’Italie
69007 Lyon – FRANCE
Loris.Marchal@ens-lyon.fr ♦ http://perso.ens-lyon.fr/loris.marchal

POSITIONS

• **CNRS researcher (2007-present)**, at the LIP laboratory, located in the ENS Lyon (École Normale Superieure de Lyon) school, in the “ROMA” common CNRS - INRIA - ENS-Lyon research project (Resource Optimization: Models, Algorithms, and scheduling). This is a full time permanent researcher position.
• **Visitor Assistant (September 2006 – January 2007)** in the ACIS laboratory of the University of Florida in Gainesville, USA.

EDUCATION

• **Ph.D. (Doctorat)** from the École Normale Superieure de Lyon defended in October 2006, entitled “Communications collectives et ordonnancement en régime permanent sur plates-formes hétérogènes” (Collective communications and steady-state scheduling on heterogeneous platforms) and prepared under the supervision of Olivier BEAUMONT and Yves ROBERT. Referees: Pierre FRAIGNIAUD and Alix MUNIER-KORDON.
• **Master (DEA)** of computer science from École Normale Superieure de Lyon, June 2003. Research work under the supervision of Yves Robert and entitled “Pipelined collective communications on heterogeneous platforms”.
• **Student**, École Normale Superieure de Lyon, 2000-2004.

RECENT FUNDED PROJECTS

**ANR White Project Rescue (2010-2014), 4 years.** The main objective of this project is to develop new algorithmic techniques and software tools to solve the exascale resilience problem. Solving this problem implies a departure from current approaches, and calls for yet-to-be-discovered algorithms, protocols and software tools. I am a member of this project.

**ANR Project Solhar (2013-2017), 4 years.** This project aims at studying and designing algorithms and parallel programming models for implementing direct methods for the solution of sparse linear systems on emerging computers equipped with accelerators. I am a member of this project and in charge of one of the four tasks constituting the project.

SCIENTIFIC ANIMATION AND RESEARCH MANAGEMENT

• **Program committee chair** of the HeteroPar 2016 workshop, co-organized with EuroPar 2016 in Grenoble, France


• Selection committees for assistant professors (Comités de Sélection de Maîtres de Conférences) at University of Besançon (France) in 2012, at Polytech Tours (France) in 2013, and at University of Bordeaux 1 (France) in 2016.

• Workshop organization Workshop on “Scheduling for large-scale systems”, May 18–21, 2008, in Aussois, France, with 36 invited researchers for http://graal.ens-lyon.fr/~lmarchal/aussois/. Member of the organization committee of this workshop series, whose next venue is the 9th, in Lyon http://scheduling2014.sciencesconf.org/, July 1–4, 2014.

• Examiner for the competitive selection of ENS students, in 2010, 2011 and 2012. Co-responsible of the practical examination in algorithms and programming, which is part of the competitive selection of the students of the three Écoles Normales Supérieures (Paris-Saclay, Lyon, and Paris).

• Member of the Scientific Council of the ENSMM school (École Nationale Supérieure de Mécanique et des Microtechniques, Besançon, France), 2014–2017.

• Responsible of the competitive selection of ENS Lyon Student for Computer Science, starting in September 2017. In charge of coordinating and co-organizing the computer science exams for the selection of the three Écoles Normales Supérieures (Paris-Saclay, Lyon, and Paris).

• Editor of a special issue of the Parallel Computing journal (Elsevier), following the 2008 "Scheduling for large-scale systems” workshop, with Frédéric Vivien.

• Editor of a special issue of the Parallel Computing journal (Elsevier), following the 2008 "Scheduling for large-scale systems” workshop, with Frédéric Vivien.

• Editor of a special issue of the Parallel Computing journal (Elsevier) focused on heterogeneous computing, following both HeteroPar’2016 and HCW 2016, with Erik Saule (HCW’2016 chair) and Oliver Sinnen.

SUPERVISION

PhD candidates


• Bertrand Simon (2015–). Thesis on task graph scheduling under limited memory. Co-advised with Frédéric Vivien.
• **Changjiang Gou (2016–).** Thesis on communication- and memory-aware graph scheduling. Co-advised with Anne Benoit.

**Post-doc researchers**

**Master students**
- Bertrand Simon (ENS Lyon, France): “Scheduling trees of malleable tasks under memory constraints” (Feb. – Jul. 2014), co-advised with Frédéric Vivien.

**Bachelor students**
- Clément Brasseur (ENS Lyon, France): “Tree traversal under memory constraints” (June – July 2015), co-advised with Guillaume Aupy.
- Hanna Nagy (Cluj University, Romania): “Task graph scheduling with bounded memory” (June – Sept. 2017), co-advised with Bertrand Simon and Fédéric Vivien.

**Teaching**
- Practicals for Introduction to programming, bachelor course, University Lyon 1, in 2016 (24h).
- Tutorials for Complexity and decidability, master course, University Lyon 1, in 2017 (16h).

**Publications (sorted by type and publication date)**

**International journals**


**Book chapters**


International conference proceedings


International workshop proceedings


Theses


Research reports (non published elsewhere yet)


