
Work Experience

- 2011– **Engineer/Researcher**, Eonos Investment Technologies. Machine learning.
- 2011–2011 **Postdoctoral fellow**, INRIA, Bordeaux. Complex networks visualisation.
- 2009–2010 **Postdoctoral fellow**, CNRS, Paris (iscpif.fr). Analysis of complex networks.
- 2006–2009 **Teaching assistant**, École Normale Supérieure de Lyon,
- 2003–2007 Model answers to exams. **Writing, scientific and typographic proofreading**. H&K publishing.

Miscellaneous

- Science popularizer: talk, radio, booth, articles,
- Interns supervisor (Master students, 2 to 6 months training), workshop organization,
- Consultant for Veolia: design of a large scale integrated model,
- \LaTeX trainer (2 or 3 days sessions, 8 trainees),

My work consists in measuring, modeling and simulating complex systems and complex networks (like social networks), then analysing the large datasets collected, and their evolution.

Skills

Thanks to my successive research positions, I've learnt to:

- explain difficult concepts to specialists / general audience / students, to one or one hundred people at a time, through formal presentation with slides / written articles / informal conversation,
- learn fast with an in-depth understanding,
- work in interdisciplinary and international teams (with physicists, mathematicians, geographers, biologists, software engineers), motivate team members, organize a workshop,
- work autonomously and define the relevant problems to solve, with rigor and creativity.

Theoretical Expert in algorithmics (including data structures and complexity). Proficient in probability, modeling, graph theory. General knowledge in theoretical computer science: machine learning (semi-supervised learning, active learning) game theory, operational research, combinatorial optimization, logic, automata, programming paradigms, statistics, etc.

Technical Programming: Expert in [OCaml](#). Good knowledge in SQL, C++. Some knowledge in UML, Shell, Scilab, Java, PHP, Maple, Python.

Experience in dealing with large datasets.

Tools: Expert in \LaTeX (local guru). Good knowledge in Gnuplot, Linux, Emacs. Some knowledge in R, SVN/git.

Languages

French: mother tongue.

English: TOEIC 990/990.

German: written comprehension, attended classes for 10 years, can reactivate it in a few months.

Miscellaneous

AFPS (first aid certificate).

BAFA (taking care of children during organized holidays). I worked in teams of 8 adults, children aged 8–15.

Education and awards

- 2011 Admis Chargé de recherche (fonctionnaire), INRA.
- 2005–2008 **PhD in computer science**, École Normale Supérieure de Lyon, *With honors*.
- 2004–2005 **MPRI (Parisian Master for Research in Computer Science)**. Ranked 6th/50 (1st at the final exams).
- 2002–2004 **École Normale Supérieure de Lyon**. Admitted 3rd, also admitted to Polytechnique and ENS Ulm.
- 2000–2002 **Classes préparatoires aux grandes écoles**, lycée Louis le Grand, Paris.
Main subjects: mathematics, physics, computer science.
- 2000 **Baccalauréat** (end of High school). *With honors*.
Concours général (High school national competition) regional award in mathematics.
- 1989–1999 **CHA** (Primary and secondary school with up to 10h music lessons a week plus homework). Guitar, piano, solfège (technical skills: sight singing, musical dictation, score proofreading, etc.), singing, composing.

Interests

- Programming (if algorithmically challenging, e.g.: logic puzzle generator/solver);
- Magic: cards tricks (president of the local club for 4 years), juggling and circus arts;
- Innovative board games, if requiring strategy and reflexion;
- Music: piano and guitar (classical), Photography, Cooking, Do-it-yourself and arts and crafts;
- Sports: long-distance running, Alpine and cross-country skiing, badminton and squash;
- [OpenStreetMap](#) contributor (map of a village, statistics tool, quality assurance, etc.)