

Christophe-Marie Duquesne

Software Engineer: Optimization Solvers, Filesystems, Android Applications

French, willing to relocate to the San Francisco area. Availability: February 2013

Corporate Experience

- 2009–2012 **Amadeus**, *PhD Student*, Sophia Antipolis, France.
Researched how to assign aircraft on an airline network in the most efficient way. I authored several projects, including a C++ solver, a Python suite of 20+ command line tools, and Hadoop data mining scripts. I also worked as a teaching assistant at the university, further improving my communication and public speaking skills.
- May–August 2008 **Rio Tinto Alcan**, *Internee*, Clermont Ferrand, France.
Co-authored a C++ library for optimizing the revenue of a metal factory. This work was published in the corporate journal of the company.
- May–August 2007 **GE Healthcare**, *Internee*, Paris, France.
Elaborated an UML spec for the refactoring of 20.000 lines of C++.

Selected Open Source Contributions

- Java Author of **talkmyphone**, an android application allowing phone control via gtalk. It had 10.000+ downloads, and was forked 50 times. It was then successfully handed over to **other developers**.
- C Author of **lazygpsolverlibs**, a set of proxy libraries targeting cplex, gurobi and xpress. I also started writing **sharebox**, a distributed FUSE file system based on git.
- Python Contributor to **pulp-or**, a linear programming Python library. Author of small tools, like **michel**, a command line program providing bidirectionnal synchronization of google tasks with text files.
- C++ Author of **yaposib**, a Python binding to COIN-OSI that is now supported by **pulp-or**.
- Misc Lua, Ada, Bash, Makefile, m4, autotools, cmake... See my **github résumé**. My kudorank on **ohloh** is 9, among the **top 2%** of opensource developers.
- Linux My daily operating system: I **blog** about it sometimes.

Education

- 2009–2012 **PhD Thesis**, *G-SCOP Laboratory*, Grenoble, France.
Title: Integration of the fleet deployment and of the passenger service in the airline schedule management. Done at **Amadeus**. **Advisors:** **Professor Denis Naddef**, **Doctor Olivier Briant**.
- 2005–2009 **BS and MS in Computer Science**, *ENSIMAG*, Grenoble, France.
Top French school of Applied Mathematics and Computer Science with highly selective recruitment.
- 2002–2005 **Preparatory classes**, *Lycée Thiers*, Marseille, France.
Mathematics and Physics courses before a national competitive examination to Grandes Écoles.

Activities and interests

- Hobbies I like travelling. I backpacked in 13 countries in Eastern Europe and South East Asia.
- Sports Running, Cycling, Hiking. I also played rugby union for 7 years.
- Activities I was the president of a large **campus student association** (5.000 members) during university.