

Christophe-Marie Duquesne

*I am a french software engineer finishing a PhD in Optimization. I have developed optimization solvers and android applications. I am willing to relocate to the San Francisco area.
Availability: February 2013*

Experience

- 2009–2012 **Amadeus**, PhD Student, Sophia Antipolis, FRANCE.
Researched how to put aircrafts on an airline network in the most efficient way. Technologies involved included hadoop, linear solvers, C++ and python. I also worked as a teaching assistant at the university, which now helps me to communicate better.
- May–August 2008 **Rio Tinto Alcan**, Internee, Clermont Ferrant, FRANCE.
Co-authored a C++ library for optimizing the revenue of a metal factory. This work was published in the internal journal of the enterprise.
- May–August 2007 **GE Healthcare**, Internee, Paris, FRANCE.
Elaborated an UML spec for the refactoring of 20.000 sloc of C++.

Skills

- Java **Open source:** Author of talkmyphone, an android application allowing phone control via gtalk. It had 10000+ downloads, and was forked 50 times. Development stopped 2 years ago for me to focus on my PhD, and the project was successfully handed over to others.
- C **Open source:** Author of lazylpsolverlibs, a set of proxy libraries targeting cplex, gurobi and xpress. I also started writing a distributed file system based on git.
- Python **Amadeus:** Wrote pyfleetassignment, a library and a suite of 20+ command line tools used to prototype for my thesis. **Open source:** 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++ **Amadeus:** Wrote assignfleet, a fleet assignment solver respecting the unix philosophy. **Rio Tinto Alcan:** wrote a solver for optimizing the production of a metal factory. **Open source:** 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. For unknown reasons, ohloh ranks me extremely well, among the top 1% of open source developers .
- Linux My daily operating system.

Education

- 2009–2012 **PhD Thesis**, G-SCOP Laboratory, Grenoble.
Done at **Amadeus**. Advisors: Professor Denis Naddef, Doctor Olivier Briant.
- 2005–2009 **BS and MS in Computer Science**, ENSIMAG, Grenoble.
Top French school for Applied Mathematics and Computer Science.
- 2002–2005 **Preparatory classes**, Lycée Thiers, Marseille.
Mathematics and Physics courses before a national competitive examination to Grandes Écoles.

Activities and interests

- Hobbies Travelling (so far: Eastern Europe, South-East Asia), free software.
- Sports Running, Cycling (Travelled around Belgium), Hiking. I also played rugby for 7 years.
- Activities I was the president of my campus student association during university.