Christophe-Marie Duquesne

Specialized in **Operations Research**, I am looking of a software engineering job in which I would profit from my skills in **applied mathematics**. Availability: end of 2012 / beginning of 2013.

Enterprise world

Since 2009 Amadeus, PhD Student, Sophia Antipolis, FRANCE.

My PhD is on the **fleet assignment problem**, which consists in deciding what aircraft type should be assigned to each flight leg in an airline network. It is essentially linked to **mathematical programming**, but lots of experiments are also involved, allowing me to sharpen my software engineering skills. The job of teaching assistant also gives me communication methods which are appreciated among my colleagues from the industry.

May-August Alcan Rio Tinto, Student Developer, Clermont Ferrant, FRANCE.

2008 Conceived a C++ library for optimizing the revenue of a factory. This work was published in the internal journal of the enterprise.

May-August **GE Healthcare**, *Student Developer*, Paris, FRANCE.

2007 Elaborated an UML spec for the refactoring of 20.000 sloc of C++.

Education

Since 2009 **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.

Skills

C++ **Amadeus**: Wrote assignfleet, a fleet assignment solver respecting the unix philosophy and using COIN-OSI, an open source multi solver library from IBM, to reach its goals. **Alcan**: wrote a solver for optimizing the production of a metal factory. **Open source**: Author of yaposib, a boost::python binding to COIN-OSI.

Python **Amadeus**: Most of the prototypes I write for my thesis are in python. **Open source**: Contributor to pulp-or, a linear programming python library. I also recently started to write a distributed file system based on git.

Java **Open source**: Author of $\frac{\text{talkmyphone}}{10.000 + \text{downloads}}$, and android application allowing remote control a phone through a jabber channel ($\frac{10.000 + \text{downloads}}{10.000 + \text{downloads}}$).

Misc C, Lua, Ada, Bash, Makefile, m4, autotools, cmake... See my ohloh profile.

Linux My daily operating system.

Activities and interests

Hobbies Travelling (travelled the whole Europe by train), free software.

Sports Running, Cycling (Travelled around Belgium), Water Polo.

Activities I was the president of my <u>campus student association</u> during university. More recently, I was also involved in Helping Hands, an association in Amadeus for fund raising in favor of the poorests.

The invaluable coffee stain that proudly decorates this résumé was produced using the coffee latex package