Christophe-Marie Duquesne

Software Engineer, Doctor in Applied Mathematics **Python**, **Linux**

I am French, living in Munich and looking for a job over there. I am after ambitious projects that will challenge me and allow me to grow my skills. I like to ship clean, continuously deployed code. I am a Vim user and a Belgium beer lover.

Corporate Experience

Since 2013 Data Scientist for Amadeus | Travel Intelligence (Munich, Germany).

Hadoop-based Mining on Travel Industry Data (Max 1 Petabyte). Wrote Flask web services, shipped as Debian packages and continuously integrated with Jenkins. Participated in various devops tasks: log collection, user authentication, transfer between data centers.

2009-2013 *PhD in Operations Research with Amadeus* (Sophia Antipolis, France).

Researched how to assign aircraft on an airline network in the most efficient way. Authored a C++ solver, a Python suite of 20+ command line tools, and Hadoop data mining scripts. Worked as a teaching assistant at the university and further improved my communication and public speaking skills.

2008 (3 months) *Internship at Rio Tinto Alcan* (Clermont Ferrand, France).

Authored a C++ library for optimizing the revenue of a metal factory. The software was based on a Linear Programming model and outperformed the existing in-house tool.

Open Source Contributions

Python Contributor to pulp-or, a Linear Programming library. Author of flasfka, an http

bridge for posting/getting messages to Apache Kafka. Author of persistentdicts,

a library exposing various databases with Python dict-like interfaces.

Lua Author of **lighttpd-external-auth**, a lighttpd magnet script allowing access control

via mechanisms such as OpenId.

Go Author of github.com/chmduquesne/rollinghash/adler32, a rolling version of

the adler32 hash. Contributor to jackpal/gateway, a library for discovering the

address of a LAN gateway used in **Tapei-Torrent**.

C++ Author of yaposib, a Python binding to coin-Osi. Awarded full membership in

the coin-or foundation in return.

C Author of lazylpsolverlibs, a set of proxy libraries targeting cplex, gurobi and

xpress.

Java

Author of **talkmyphone**, an android application allowing phone control via gtalk (10.000+ downloads, forked 50 times on googlecode). It was then successfully handed over to **other developers**.

Misc

Experience with **Arch Linux**, Ada, Bash, Makefile, m4, autotools, cmake... See my **github** account and my **blog**.

Education

2009-2012

PhD in Mathematics and Computer Science at **G-SCOP Laboratory** (Grenoble, France).

Integration of Fleet Deployment and of Passenger Service in Airline Schedule Management. Done at Amadeus, in the Operation Research team led by Semi Gabteni. Advisors: Denis Naddef, Olivier Briant. Defended in January 2013.

2005-2009

MS in Computer Science in ENSIMAG (Grenoble, France).

Top French school of Applied Mathematics and Computer Science with highly selective recruitment.

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 the **Grand Cercle**, one of the largest French campus student associations (5.000 members) during university.

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