Christophe-Marie Duquesne

Operations Research Analyst

Primarily a Software Engineer, I specialized in Operations Research, and then in Data Science. I love data driven decision making. I am French, living in Munich, a vim user and a **Belgium ale enthusiast**.

Corporate Experience

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

Hadoop-based Mining on Travel Industry Data (Up to 1 Petabyte). Wrote web services (Flask, Sqlite), shipped as Debian packages, continuously integrated with Jenkins. Participated in various devops tasks: log collection, user authentication, transfer between data centers (IBM WebSphere MQ, Apache Kafka, Logstash).

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

Researched how to best assign aircraft on an airline network. Authored a C++ solver and a Python suite of 20+ command line tools (Cplex, Gurobi). Benchmark were performed against real life data (mined with Hadoop). Worked as a teaching assistant at the university and 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 (Cplex). The software was based on a Linear Programming model and consistently outperformed the existing in-house tool.

Open Source Contributions

Python
Author of **yaposib**, a Python-C++ binding to **coin-Osi**. Awarded **full membership** in the coin-or foundation in return. 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.

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**.

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**.
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.

---

chmd@chmd.fr • +49 157 530 431 00 • 30 years old

Einsteinstr. 129, 81675 Munich, Germany

pdf version • **txt version** • **doc version** • **html version**