Christophe-Marie Duquesne

Software engineer, Doctor in Applied Mathematics
Python, C++, Linux

▬▬▬ Corporate Experience

June 2014 - Now	*Data Scientist for Amadeus	Travel Intelligence* (Munich, Germany).
	Hadoop-based Mining on Travel Industry Data (Max 1 PetaByte so far). Wrote Flask web services, shipped as debian package and continuously integrated with Jenkins. Participated in various devops tasks: log collection, user authentication, transfer between data centers.
2009-2012	*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).
	Co-authored a C++ library for optimizing the revenue of a metal factory.
2007 (3 months)	*Internship at GE Healthcare* (Paris, France).
	Elaborated an UML spec for the refactoring of 20.000 lines of C++.

▬▬▬ Selected 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.
Golang	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	Ada, Bash, Makefile, m4, autotools, cmake... See my github résumé.
Linux	My daily operating system: I blog about it sometimes.

▬▬▬ Education

2009-2012	*PhD in Mathematics and Computer Science at G-SCOP Laboratory* (Grenoble, France).
	Title: 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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