Luis Ricardo Martinez Diaz

Specialties: C++, Python, Linux, Operations Research
Doctor in Computer Science and Mathematics

Corporate Experience

Since 2013 : *Data Scientist for Airconomy* (Frankfurt am Main, Germany).

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Data mining on various sources to forecast passenger demands over
airline networks.
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2009-2012 : *PhD in Operations Research with Amadeus* (Sophia Antipolis, France).

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Researched how to assign aircraft on an airline network in the most
efficient way. I authored several projects, including a C++ solver,
a Python suite of 20+ command line tools, and Hadoop data mining
scripts. I also worked as a teaching assistant at the university,
further improving my communication and public speaking skills.
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2008 (3 months) : *Internship at Rio Tinto Alcan* (Clermont Ferrand, France).

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Co-authored a C++ library for optimizing the revenue of a metal
factory. This work was published in the corporate journal of the
company.
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2007 (3 months) : *Internship at GE Healthcare* (Paris, France).

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 Elaborated an UML spec for the refactoring of 20.000 lines of C++.
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Selected Open Source Contributions

Python : 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++ : Author of yaposib, a Python binding to COIN-OSI that is now supported by pulp-or.

C : Author of lazylpsolverlibs, a set of proxy libraries targeting cplex, gurobi and xpress. I also started writing sharebox, a distributed FUSE file system based on git.

Java : Author of talkmyphone, an android application allowing phone control via gtalk. It had 10.000+ downloads, and was forked 50 times. It was then successfully handed over to other developers.

Misc : Lua, Ada, Bash, Makefile, m4, autotools, cmake... See my github résumé. My kudorank on ohloh is 9, among the top 2% of opensource developers.

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).

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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](http://www.linkedin.com/in/semigabteni). Advisors: [Denis
Naddef](http://www.g-scop.inpg.fr/~naddefd/), [Olivier
Briant](http://www.g-scop.inpg.fr/~brianto/index.php?page=1).
Defended in January 2013.
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2005-2009 : *MS in Computer Science in ENSIMAG* (Grenoble, France).

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Top French school of Applied Mathematics and Computer Science with
highly selective recruitment.
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2002-2005 : *Preparatory classes in Lycée Thiers* (Marseille, France).

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Mathematics and Physics courses before a national competitive
examination to Grandes Écoles.
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