⌊nicolas dumazet⌋

software engineer

Young and open-minded; fast and motivated,
I develop to spread around the enthusiasm
I have for well-written software.

Enterprise world

April 2011 - present

Google, *Software Engineer*, **Zurich**, Switzerland.
Image Search Infrastructure.

↪ High performance at an impressive scale
↪ Handling reliably several petabytes of data daily

Launched a new framework allowing image indexing for Google. Based on the Percolator storage system.
My team is responsible for all content shown on images.google.com. I tweak performance and algorithms, monitor and diagnose live systems.
Particulary exciting, given the data size.

September 2009 - December 2010

Nexedi K.K., *R&D Software Developer*, **Tokyo**, Japan.
Open Source ERP development, Python, Zope, MySQL.

↪ Reporting to Yoshinori Okuji
↪ Complex, long-wanted improvements of ERP5 internals

I was assigned to R&D only, helping with modernization of code and algorithmic issues.
My last project was a two month long task involving an automated data migration on all instances. The complex change allowed better performances, and through-the-web development.
During those last two months, I also had to train and supervise a newcomer to assist me in this migration process.

Internships

February - July 2009

National Institute of Informatics, *Visiting researcher*, **Tokyo**, Japan.
A short experimental stop by the Research world.

↪ Web Services (efficient service level agreements, composition)
↪ P2P networks (Chord overlays)

Open Source

Mercurial

2009 - 2011 **Mercurial community**, *Crew member*.
- ↪ One of the trusted core members that can push directly changes
- ↪ Reviewing community patches to include them in mainline
- ↪ Trying to improve an user-friendly but complex software

Strong focus on user experience: basic features of the software should not allow losing data, and names should be intuitive rather rather than catchy.
Code review practices are also very important, with a safe, healthy review process.

May - August 2009 **Google Summer of Code 2009**, *Student Developer*, **Google**.
- ↪ Mentored by Benoit Boissinot; co-mentor **Brodie Rao**
- ↪ Improving reliability of the *inotify* file event notification system

Mediawiki

2008 **Google Summer of Code 2008**, *Student Developer*, **Google**.
- ↪ Mentored by Brion Vibber for the Wikimedia Foundation
- ↪ Implementing core category renaming for MediaWiki, Wikipedia's PHP engine

2007 - May 2010 **pywikipediabot project**, *Developer*.
Python framework for automated edits on MediaWiki wikis
Maintaining these tools against the latest improvements of MediaWiki is critical for Wikipedia: robots using the framework are relied upon for daily maintenance of the free encyclopedia

Education

2007 - 2009 **MS, Computer Science**, *ENSIMAG*, Grenoble, France.
- ↪ Top French school for applied mathematics and informatics.
- ↪ Spent a semester abroad on exchange at **National University of Singapore**.

2006 - 2007 **BS, Computer Science**, *ENSIMAG*, Grenoble, France.

2004 - 2006 **Preparatory classes**, La Martinière Monplaisir College, Lyon, France.
Intensive Mathematics and Physics courses before taking the national competitive examination to Grandes Écoles

Relevant academic project

2008 **Search engine**.
Using Hadoop, the Open Source Java Implementation of MapReduce
- ↪ On a cluster of 30 computers for crawling and indexing
- ↪ 2 months fulltime - 3 students

Skills

Development

Latest topics	High performance distributed systems
Been coding in	**Python**, **C++**, Java, PHP, SQL, C, ...
Web	Able to debug or extend jQuery/Javascript applications
Environments	**Linux**, Windows

Communication

English	**fluent**
French	**first language**

Activities and Interests

Wiki	Former sysop/administrator on the French Wikipedia
Sports	Climbing, long distance running; swimming
Relax?	Strong coffee or dark beer, but relaxed Jazz
Share	I enjoy guiding or hosting travelers for the Couchsurfing hospitality network