

# Valentin Reis | R&D Engineer, Machine Learning and Infrastructure

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Age: 27 • Nationality: French.

I am a Computer Science PhD candidate proficient with **machine learning** and **functional programming** techniques for **software and infrastructure**.

## Employment

### Inria and Grenoble Alpes University, France

*Computer Science PhD*, 2015 – September 2018.

**Current:** Developing machine-learning techniques to improve user metrics in High Performance Computing (HPC) platforms.

### Argonne National Laboratory, USA

*Academic visitor*, February 2018.

Using bandit algorithms to dynamically reconfigure computational nodes for power efficiency.

### University of Warsaw, Poland

*Research Intern*, 2015 - 4 months.

Developed a ML-based system for parallel job scheduling and performed data analysis on cloud computing workload traces.

### Informatics Laboratory of Grenoble, France

*Research Intern*, 2014 - 3 months.

Used supervised learning for application runtime prediction.

### University of Sao Paulo, Brasil

*Research Intern*, 2013 - 4 months.

Developed a compute cluster simulator for the purpose of evaluating scheduling algorithms.

## Education

### PhD - Computer Science (2015-2018)

○ Inria/Grenoble Alpes University

### MSc - Computer Science (2013-2015)

○ Ensimag/Grenoble Alpes University

### Bachelors - Applied Mathematics (2013)

○ Grenoble Alpes University

## Skills

### Machine Learning

Trained in applied mathematics, statistics and optimization. I can explore data, extract problems, develop models, implement algorithms and validate the added value of solutions.

★ Datascience   ★ Online Learning   ★ Bandits  
★ Numerical Optimization   Matlab   Sklearn

### IT Infrastructure

GNU/Linux native with High Performance Computing experience. I am able to run complex computational workflows on large-scale infrastructures. I operate infrastructure as code and maintain package **collections** for my team.

★ GNU/Linux   ★ HPC   ★ Nix   ★ NixOS  
AWS/GCE   Spark   ELK   ZeroMQ

### Software Engineering

I have written software ranging from discrete-event simulation to numerical optimization. I can version control, test, package, document, publish. For instance, I have written and maintain the **Obandit** library for multi-armed bandits. Have a look at my **Github** profile!

★ Python   ★ R   ★ Ocaml   ★ Haskell   ★ Bash  
C/C++   Java   Cython   SQL

## Communication

- **French:** Native
- **English:** Fluent
- **Spanish, German, Portuguese:** Beginner