

Valentin Reis | Machine Learning and High Performance Computing Expert

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📄 github.com/freuk • Age: 27 • Nationality: French.

I am a Computer Science PhD candidate proficient with **machine learning**, **high performance computing** and **functional programming/operations**.

Employment



Inria and Grenoble Alpes University, France

Computer Science PhD, 2015 – September 2018.

Developing machine-learning techniques to improve the management of High Performance Computing (HPC) platforms.



Argonne National Laboratory, United States

Academic visitor, February 2018.

Developing learning algorithms to dynamically control CPU power on computational nodes.



University of Warsaw, Poland

Research Intern, 2015 - 4 months.

Developed a machine learning-based predictive approach for scheduling jobs in HPC.



Informatics Laboratory of Grenoble, France

Research Intern, 2014 - 3 months.

Investigated supervised learning approaches to predicting the running time of HPC applications.



University of Sao Paulo, Brasil

Research Intern, 2013 - 4 months.

Developed a computing 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

Personal

I practice yoga and am an avid traveler. When I can't travel, I [read](#) instead.

Skills

Machine Learning

Experienced with applied mathematics and statistical analysis. I am able to create the appropriate models, implement algorithms and run the complex data-based workflows needed to validate the added value of solutions. I am specialized in online machine learning methods.

★ Modeling ★ Supervised Learning ★ Validation
★ Feature Engineering ★ Numerical Optimization
Matlab Scikit-learn ★ Online Learning
★ Bandit Algorithms DL toolkits

High Performance Computing

GNU/Linux native with a strong experience of parallel computing platforms. I am able to run complex computational workflows on large-scale infrastructures. I operate multiple software-defined **servers** and maintain package **collections** for my team.

★ HPC ★ Nix ★ NixOS ★ Containers ★ Debian
★ NixOps AWS/GCE Apache Spark ELK Stack
BLAS ZeroMQ MPI

Software Engineering

I have written software ranging from discrete-event simulation to numerical optimization tools. I am experienced with version control, testing, packaging, publishing, GNU toolchain use. For instance, I have written and maintain the Ocaml **module** for multi-armed bandits. Have a look at my [github](#) profile.

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

Communication

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