

# Laurent Prosperi

Computer Science student - Master 1

## Education

- 2016- **Master 1 in Computer Science**, *Ecole Normale Supérieure de Cachan*, Cachan, France.  
Courses include: Probabilistic Aspects of Computer Science, Network, Machine learning, Algorithmics and bioinformatics, Robot Motion Planning and Control, Software engineering
- 2015-2016 **L3 in Computer Science**, *Ecole Normale Supérieure de Cachan*, Cachan, France.  
Courses include: Computational complexity theory, Process architecture, Computer programming, Discrete mathematics, Algorithmics, Databases, Formal language, Logic
- The Ecole Normale Supérieure de Cachan is one of only three prestigious higher-education institutions in France which provides specific training for students aiming to become university teachers and researchers in their field.
- 2012-2015 **Classe préparatoire in Mathematics and Physics, MPSI-MP-MP\***, *Lycée Thiers*, Marseille, France.  
A two-year course covering the first two years of the Licence which is required in order to take the highly competitive entrance examinations for the prestigious French grandes écoles.
- Juin 2012 **Baccalauréat S, Mention Très Bien(highest grade)**, *Lycée Chevreul Blancarde*, Marseille.  
The French national school-leaving qualification, with specialisation in science.

## Work Experience

- Juin-Juillet **6-week internship**, *LIF*, Marseille, France.
- 2016 I worked in DALGO team, with Emmanuel Godard and Arnaud Labourel, on Random Biased Walk for Rendez-vous and and Exploration by mobilis agents

## Software Projects

- September 2016 - **Software engineering project : an IDE**, *Ecole Normale Supérieure de Cachan*, Cachan.  
  - Small team : six students
  - [https://github.com/severus21/ide\\_cachan](https://github.com/severus21/ide_cachan)
- November 2016 **Network project : Flooding protocol**, *Ecole Normale Supérieure de Cachan*, Cachan.  
  - Two students
  - [https://github.com/severus21/ens\\_projet\\_reseau](https://github.com/severus21/ens_projet_reseau)
- 2015 - May 2016 **Deduplication filesystem**.  
  - a fast, decentralized, scalable and memory-efficient deduplication system
  - <http://laurentprosperi.info/projects/#Mnemosyne>
- 2014 - June 2016 **Distributed web crawler**.  
  - a scalable, decentralized and fault-tolerant web crawler
  - Protocols : http(s), ftp(s), bittorrent, tor hidden services
  - <http://laurentprosperi.info/projects/#Artemis>
- February 2015 - May 2015 **Tower defense 2D**, *Ecole Normale Supérieure de Cachan*, Cachan.  
  - Small team : three students
  - <http://laurentprosperi.info/projects/#LOTD>

- November 2015 **Compiler C-**, *Ecole Normale Supérieure de Cachan*, Cachan.
  - Compiler from C-, a simplified version of C with exceptions, to X64 assembler, written in OCAML
  - <http://laurentprosperi.info/projects/#C-->
- 2014 **An incremental filesystem**, *Lycée Thiers*, Marseille.
  - local deduplication and versioning
  - <http://laurentprosperi.info/projects/#TIPE5/2---Partie-C++>
- 2014-2015 **TIPE : Archiving cyber space time**, *Lycée Thiers*, Marseille.
  - Centralized and distributed web crawler
  - <http://laurentprosperi.info/projects/#TIPE5/2---Partie-Python>
- March-May 2015 **Cluster managment**.
  - Several dozens of VM (runabove(now OVH), google cloud)
- 2013-2014 **TIPE : Optical character recognition**, *Lycée Thiers*, Marseille.
  - Deep learning( *convolutional neural network* ).
- 2012-2014 **Framework PHP**.
  - Model View Controller(MVC) and Data Access Object(DAO) architectural pattern, forum, automatisations des requêtes SQL, form handler, Automatic pagination
  - Production during one year
  - <https://github.com/severus21/Scientia-Vulgaria>

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## Computing skills

- Languages
  - Beginner : Assembleur(x86), JS, CSS, BASH, Erlang
  - Intermediate : X(HTML), C, PHP, Scala
  - Advanced : Python, C++, OCaml
- Git(Intermediate)
- Database Management System
  - MySQL, MariaDB, Redis, MongoDB(notions)
- Management
  - Apache2, BIND, Postfix, Fail2ban, Iptables
- Various
  - RabbitMQ, Sphinx(beginner)

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## Languages

- French native language
- Anglais fluent working knowledge

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## Additional Information

- Permis B
- PSC 1 First Aid and CPR Certification
- Sports Trail/Ultra-Trail, Raid, Swimming, Ski, ATV, Sailing
- Music Guitare
- Hobbies ancient history, geopolitics

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## Extra Curricular Activities

- September 2016 - **Director of Pirat[ENS]**, *Ecole Normale Supérieure de Cachan*, Cachan.
  - This is the sailing association of the Ecole Normale Supérieure de Cachan, there is about 20 members. We organize sailing week-ends.
- April 2016 - **Volunteer in KULTTE**, *Ecole Normale Supérieure de Cachan*, Cachan.
  - This is the Cachan Ultra-Trail Team, there is about 50 members, we organize athletic training, trail week-ends and take part in sport competitions( as Raid CentralSupélec ). I am in charge of communication and IT.