# Clément Lalanne

Computer science student École Normale Supérieure - Paris, France



## Current situation

2019–2020 Volountary Complementary Formation in Mathematics, École normale supérieure, Paris, France.

#### Curriculum

- 2018–2019 Master's degree student, MVA, École normale supérieure Paris-Saclay, Paris, France, Graduated with Highest Honors.

  http://math.ens-paris-saclay.fr/version-française/formations/master-mva/
- 2017–2018 Master's degree student in Computer Science, École normale supérieure, Paris, France, www.ens.fr.
- 2016–2017 Bachelor's degree, Computer Science, École normale supérieure, Paris, France, www.ens.fr.
- 2015–2016 Preparatory courses for competitive entrance examination 'Classes Préparatoires aux Grandes Ecoles', mathematics and physics, Louis-Le-Grand High School MP\*3, Paris. France
- 2013–2015 Preparatory courses for competitive entrance examination 'Classes Préparatoires aux Grandes Ecoles', mathematics and physics, Louis Barthou High School, Pau. France
- 2010–2013 General Baccalaureate, major in science, Louis Barthou High School, Pau, France.

# Internships

Spring- Nystagmus waveform extraction using convolutional dictionary learning with de-Summer trending, Supervised by Nicolas Vayatis, CMLA COGNACG, Paris.

2019 France

Spring- Storage-optimal continuous optimization, Supervised by Volkan Cevher, EPFL Lions, Summer Lausanne.

2018 Switzerland

Summer 2017 **De-anonymization and privacy : Study of a random graph model**, Supervised by Florian Simatos, ISAE Supaero, Toulouse. France

#### Achievements

- 2016 Passed École normale supérieure entrance examination, ranked 15<sup>th</sup>.
- 2016 Passed École Polytechnique entrance examination, ranked 76<sup>th</sup>, www.polytechnique.edu.

### Useful Skills

Languages Python, OCaml, LATEX.

Tools Git.

#### Reference

Tutor Professor Francis Bach. Researcher at INRIA Paris and leader of the SIERRA project-team within the Computer Science department of École normale supérieure, (Francis Bach's homepage).

## Other activities

Sports Running, Canyoning.

Music Music theory, Guitar, Composition, Band experience.

Video Games Experience playing as a team, League of Legends, ARK Survival Evolved.

# Teaching Units

#### 2019-2020

- Math Statistics, S. Gaïffas.
- Math Stochastic Processes, G. Giacomin.
- Math Complex Analysis, N. Bergeron.
- Math Differential Geometry, O. Biquard.
- Math Functional Analysis, I. Gallagher.
- Math **Optimal Transport and Applications**, F. Bolley. 2018-2019
- App M Large Scale Distributed Optimization & Computing, J.C. Pasquet, E. Chouzenoux.
- App M Inverse Problems and Imagery, J. Garnier.
- App M Kernel Methods for Machine Learning, J.P. Vert, J. Mairal.
- App M Learning with Deep Neural Networks, S. Mallat.
- App M Theorical Foundation of Deep Learning, S. Gerchinovitz, F. Malgouyres, E. Pauwels, N. Thome.
- App M Algorithms for Speech and Natural Language Processing, E. Dupoux, B. Sagot.
- App M Deep Learning, V. Lepetit.
- App M Object Recognition and Computer Vision, J. Ponce.
- App M Mathematical Foundation of Data Science, G. Peyré.
- App M Graphs in Machine Learning, M. Valko.
- App M Reinforcement Learning, A. Lazaric.
- App M **Probabilistic Graphical Models**, F. Bach. 2017-2018
- App M Statistical Learning, F. Bach.
- App M Convex and Combinatorial Optimization, A. D'Aspremont.
- App M Introduction to Computer Vision, J. Sivic.
  - CS Robotics, J.P. Laumond.
  - CS Software Engineering, D. Baelde.
  - CS Parallel and reactive programming, A. Cohen. 2016-2017
- App M Information Theory, B. Blaszczyszyn.
  - Math Topology and Diffential Calculus, L. Charles.
  - Math Integration and Probabilities, R. Cerf.
    - CS CS by practice, D. Naccache.
    - CS Systems and Networks, M. Pouzet.
    - CS Digital Systems: from circuits to algorithms, D. Naccache.
    - CS Formal Languages, Calculability and Complexity, D. Vergnaud.
    - CS Programming languages and compilation, J.C. Filliâtre.
    - CS Algorithmics and Programming, A. Bouillard. 2013-2016
  - Math General formation equivalent to two years of bachelor's degree.
    - CS General formation equivalent to two years of bachelor's degree.
    - Ph General formation equivalent to two years of bachelor's degree.