

# Quentin Bertrand

PH.D STUDENT

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I am a currently a second-year Ph.D student in statistics and optimization under the supervision of Joseph Salmon and Alexandre Gramfort (core scikit-learn contributor).

## Experience

### Inria Saclay

PH.D STUDENT

*Saclay, France*

*Oct. 2018 - Sept. 2021*

- I work on optimization solvers for high dimensional linear inverse problems, applied to neuroimaging.
- See our latest NeurIPS2019 paper on concomitant estimation through smoothed nuclear norm + open python code.

### Stanford Research Institute (SRI International)

INTERNSHIP - MACHINE LEARNING RESEARCHER

*Menlo Park, United States*

*Mar. 2017 - Aug. 2017*

- Worked on DARPA's project probabilistic programming for advanced machine learning
- Designed and implemented new algorithms to compute exact bounds in graphical models, see our preprint

## Education

### École normale supérieure

MASTER OF SCIENCE IN MATHEMATICS, VISION, AND MACHINE LEARNING

*Cachan, France*

*Sept. 2017 - Aug. 2018*

- Final-year student in machine learning at École Normale Supérieure, leading research institute in France

### École polytechnique

BACHELOR AND MASTER OF SCIENCE IN ENGINEERING

*Paris, France*

*Sept. 2014 - Jun. 2017*

- Major in applied mathematics and computer science

## Projects

### How to reduce the number of trees in a random forest

THIRD YEAR PROJECT

*Sept. 2016 - Mar. 2017*

- Project aiming at reducing the number of trees in random forests in order to understand better why this classification and regression algorithm works (supervised by E. Scornet and J. Josse)

### Machine learning competitions

*2017 - 2018*

- Owkin data science competition aiming at predicting diseases from DNA
- AXA machine learning competition aiming at forecasting time series of calls in AXA call centers

## Skills and Interests

### LANGUAGES

**French** Native  
**English** Fluent  
**German** Basic skills

### COMPUTER SCIENCE

**Python**  
**R, MATLAB**  
**Git, LaTeX**

### KEY SKILLS

**Convex optimization**  
**Sparsity**  
**High dimension**

### INTERESTS

**Chess** 2200 Elo  
**Swimming** 2 hour a week  
**Science** Interested in all areas