

Solenne Gaucher

PhD Candidate

✉ solenne.gaucher@gmail.com

📄 solennegaucher.github.io

Professional Experience

- Sept. 2018 to (Sept. 2022) **Laboratoire de Mathématiques d'Orsay**, *PhD Candidate*, Orsay, France.
PhD in Statistics on link prediction with bandit feedback, under the supervision of Christophe Giraud.
- April to July 2018 **Centre de Recherche en Économie et Statistiques, ENSAE**, *Research intern*, Palaiseau, France.
Studied maximum likelihood estimation for sparse network in the stochastic block model, under the supervision of Olga Klopp.
- April to July 2017 **Dept. of Statistics, Oxford University**, *Research intern*, Oxford, Royaume-Uni.
Developed a multi-scale, Bayesian, non-parametric approach for testing for dependance, based on Pòlya Tree and Bernstein polynomials, under the supervision of Chris Holmes and Sarah Filippi.
- June to Aug. 2016 **Médiactif**, *Software development trainee*, Bagneux, France.
Analysed trajectories of pedestrians obtained from geolocalisation data; modeled and simulated crowd motion

Teaching

- 2019 – 2020 **Teaching Assistant**, ENSAE, Palaiseau, France.
Introduction to Machine Learning (Master level).
- 2018 – 2020 **Teaching Assistant**, ENSAE, Palaiseau, France.
Statistics 1 (Master level).
- 2018 – 2019 **Teaching Assistant**, ENSAE, Palaiseau, France.
Refresher on Mathematical Statistics (Master level).

Education

- 2014 – 2018 **École polytechnique**, Palaiseau, France.
Master of Science in Applied Mathematics.
- 2017 – 2018 **Université Paris-Sud**, Orsay, France.
MS in Probability and Statistics.
- 2012 – 2014 **Lycée Hoche**, Versailles, France.
An intensive two-year preparatory programme leading to competitive entrance examinations to the French Grandes Écoles engineering schools. Maths and Physics track courses.
- 2009 – 2012 **Lycée Franco-Allemand**, Buc, France.
French-German Baccalauréat in Science (equivalent to A levels).

Articles

- 2019 **Link Prediction in the Stochastic Block Model with Outliers**, S. Gaucher, O. Klopp and G. Robin, *Arxiv preprints*.
- 2019 **Maximum Likelihood Estimation of Sparse Networks with Missing Observations**, S. Gaucher and O. Klopp, *Arxiv preprints*.

Oral Presentations

- Oct. 2019 **Robust Link Prediction in the Stochastic Block Model**, *Network Days III*, Orsay, France.
- Apr. 2019 **Maximum Likelihood Estimation of Sparse Networks with Missing Observations**, *Huitièmes rencontres des jeunes statisticiens*, Hyères, France.
- Oct. 2018 **Estimation of Sparse Networks**, *Network Days II*, Orsay, France.

Skills

- Computer Science Programming skills in **R, Python, Matlab, C++**.
- Languages French (native), English (fluent, IELTS 8), German (intermediate).