

Simon MAURAS



INFORMATIONS

EMAIL: simon.mauras@irif.fr
WEBPAGE: <https://www.irif.fr/~mauras/>
ADRESS: Université de Paris, Bâtiment Sophie Germain, Case 7014
8 Place Aurélie Nemours, 75205 Paris Cedex 13, France

RESEARCH

Currently **Doctoral candidate**
Stable Matching Robustness.
Supervised by Claire Mathieu (IRIF, Paris) and Hugo Gimbert (LaBRI, Bordeaux).

Summer 2019 **Visiting Graduate Student, Simons Institute, Berkeley**
Online and Matching-Based Market Design.
Invited by Jacob Leshno (Chicago Booth, IL, USA).

Summer 2018 **Research internship**
Rank aggregation with ties.
Supervised by Claire Mathieu (IRIF, Paris).

Summer 2016 **Research internship**
Algorithms and datastructures in external memory.
Supervised by Michael A. Bender (Stony Brook University, NY, USA)

Summer 2015 **Research internship**
Automatic Extraction of Automata from Low-Level Event-Driven Programs.
Supervised by Florence Maraninchi (Verimag, Grenoble)

SELECTED PUBLICATIONS

- [1] Simon Mauras. Two-sided random matching markets: Ex-ante equivalence of the deferred acceptance procedures. In *Proceedings of the 21st ACM Conference on Economics and Computation (EC)*, 2020.
- [2] Hugo Gimbert, Claire Mathieu, and Simon Mauras. Two-sided matching markets with correlated random preferences have few stable pairs. *arXiv preprint arXiv:1904.03890*, 2019.
- [3] Claire Mathieu and Simon Mauras. How to aggregate top-lists: Approximation algorithms via scores and average ranks. In *Proceedings of the 31st ACM-SIAM Symposium on Discrete Algorithms (SODA)*, 2020.
- [4] Michael A Bender, Martín Farach-Colton, Rob Johnson, Simon Mauras, Tyler Mayer, Cynthia A Phillips, and Helen Xu. Write-optimized skip lists. In *Proceedings of the 36th ACM SIGMOD-SIGACT-SIGAI Symposium on Principles of Database Systems (PODS)*, 2017.

RESEARCH SERVICE

Contribution at conferences

External reviewer at ICALP 2019, ESA 2019, WINE 2019, FUN 2020, WINE 2020, ITCS 2021.
Student volunteer at ICGT 2018, FOCS 2018, EC 2020, ICALP 2022.

Organization of seminars

PhD Students' Seminar (IRIF, Paris, 2019-2021).

TEACHING

2013 - ... **Member of the association France-IOI.**

Training of french high school students for the International Olympiads in Informatics
Team leader at IOI 2017 (Iran), 2018 (Japan), 2019 (Azerbaijan), 2020 (Singapore).

2018 - 2021 **Teaching assistant at Université de Paris.**

Programming in Python (1st year of B.Sc.), Analysis of structured data (2nd year of B.Sc.),
Introduction to algorithms (2nd year of B.Sc.), Programming in C (2nd year of B.Sc.),
Programming in Java (1st year of B.Sc.), Object-oriented programming (2nd year of B.Sc.)

Supervision of undergraduate students.

Maxime Dresler, Kévin Dang (Université de Paris, B.Sc., 2020) on *Rank Aggregation*.

OTHER PRODUCTIONS

Co-author of a school book (10th grade) of Computer science.

Science Numériques et Technologie, Éditions Bordas.

Software productions.

Most projects are on Github: <https://github.com/simon-mauras>

EDUCATION

- 2018 - 2021 ***Ph.D. student in Computer Science***
IRIF, Université de Paris; and LaBRI, Université de Bordeaux
- 2017 - 2018 ***M.Sc. in Computer Science***
École Normale Supérieure de Lyon
- 2016 - 2017 ***M.Sc. and Agrégation in Mathematics***
École Normale Supérieure de Lyon
- 2015 - 2016 ***M.Sc. (1st year) in Computer Science***
École Normale Supérieure de Lyon
- 2014 - 2015 ***B.Sc. in Computer Science***
École Normale Supérieure de Lyon
- B.Sc. in Mathematics***
Université Claude Bernard Lyon 1

HOBBIES

Programming competitions (Silver medalist at IOI 2012; Contestant at ICPC, Google Code Jam, ...).

Track and field (400m hurdles, decathlon).