# Simon Mauras

## Informations

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### Research Positions

Feb. 2024 - ... Chargé de recherche

Team FairPlay, INRIA Paris Saclay

Feb. 2022 - Jan. 2023 Postdoctoral Fellow

Algorithmic Mechanism Design.

Supervised by Michal Feldman (Tel Aviv University).

Sep. 2018 - Dec. 2021 Doctoral Student

Analysis of Random Models for Stable Matchings.

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)

### RESEARCH SERVICE

#### Contribution at conferences

External reviewer at SODA, ICALP, ESA, ITCS, WINE, SAGT.

Student volunteer at ICGT'18, FOCS'18, EC'20, STOC'22, ICALP'22.

Junior program committee member at WINE'21, WWW'23, EC'23, WINE'23.

#### Organization of seminars

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

# SELECTED PUBLICATIONS

- [1] Alon Eden, Michal Feldman, Kira Goldner, Simon Mauras, and Divyarthi Mohan. Constant approximation for private interdependent valuations. In Symposium on Foundations of Computer Science (FOCS), 2023.
- [2] Michal Feldman, Federico Fusco, Simon Mauras, and Rebecca Reiffenhäuser. Truthful matching with online items and offline agents. In *International Colloquium on Automata, Languages, and Programming (ICALP)*, 2023.
- [3] Simon Mauras. Two-sided random matching markets: Ex-ante equivalence of the deferred acceptance procedures. In *Conference on Economics and Computation (EC)*, 2020.
- [4] Claire Mathieu and Simon Mauras. How to aggregate top-lists: Approximation algorithms via scores and average ranks. In *Symposium on Discrete Algorithms (SODA)*, 2020.

### OTHER PRODUCTIONS

## Co-author of a school book (10<sup>th</sup> grade) of Computer science.

Science Numériques et Technologie, Éditions Bordas.

### Software productions.

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

## Teaching

#### 2018 - 2021 Teaching assistant at Université Paris Cité.

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

## Supervision of undergraduate students.

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

## OTHER ACTIVITIES

### Competitive programming

Silver medalist at IOI 2012; Contestant at ICPC, Google Code Jam,  $\dots$ 

Problem setter and judge at ICPC SWERC 2022 and 2023.

## Member of the association France-IOI.

Training of french high school students for the International Olympiads in Informatics (since 2013)

Team leader at IOI 2017 – 2022 (Iran, Japan, Azerbaijan, Singapore, Indonesia).

Elected member of the board (since 2018) and treasurer (since 2022).

## **EDUCATION**

2018 - 2021	Ph.D. student in Computer Science
	IRIF, Université Paris Cité; 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. (1 <sup>st</sup> 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