François Sellier

Education

- January 2022 Ph.D. in Computer Science, École normale supérieure, Paris, France
 - Present Algorithms and probability for streams of graphs. Supervisors: Chien-Chung Huang and Claire Mathieu. Visiting student at Brown University (Providence, RI, USA) for academic year 2022-2023.
- September 2021 Corps des mines Program, École nationale supérieure des mines de Paris, Paris, France
 - Present Engineering degree. Business and Public Administration.
- September 2018 Ingénieur Polytechnicien Program, École polytechnique, Palaiseau, France
 - Present Engineering degree. Mathematics, Applied Mathematics, Computer Science, Theoretical Physics. Specialization in Mathematics and Theoretical Computer Science.
- September 2016 Post-secondary preparatory class, Lycée Pierre de Fermat, Toulouse, France
 - June 2018 Mathematics, Physics and Computer Science.
 - June 2016 Baccalauréat général scientifique, Lycée Bellevue, Toulouse, France

Experiences

- June 2023 Software engineering intern, Citadel LLC, London, United Kingdom
- October 2023 Commodities engineering, power desk.
- November 2021 Engineering intern, Golfech Nuclear Power Plant (Électricité de France), Golfech, France
- August 2022 Maintenance operations on primary circuit.
 - March 2021 Research intern, École normale supérieure, Paris, France
 - July 2021 Submodular function maximization, graphs, and matroids. Supervisor: Chien-Chung Huang.
 - June 2020 Software engineering intern, SNCF Réseau, Paris, France
- August 2020 Timetabling algorithm.
- November 2018 Educational support, Lycée militaire de Saint-Cyr, Saint-Cyr-l'École, France
 - March 2019 Educational support, oral exams.
 - October 2018 **Officer cadet**, École spéciale militaire de Saint-Cyr, Camp Coëtquidan, France Basic training for an officer in the French Ground Army.

Skills

- Programming C, C++, Python, Java, Caml
 - Languages French: Native speaker, English: Proficient, Spanish: Basic

Publications

- My research focuses on approximation and streaming algorithms for graphs and matroids.
- SODA 2024 Robust Sparsification for Matroid Intersection with Applications (with Chien-Chung Huang).
 - ESA 2023 Parameterized Matroid-Constrained Maximum Coverage.
 - ESA 2022 Maximum Weight b-Matchings in Random-Order Streams (with Chien-Chung Huang).
- SWAT 2022 Matroid-Constrained Maximum Vertex Cover: Approximate Kernels and Streaming Algorithms (with Chien-Chung Huang).
- APPROX 2021 Semi-Streaming Algorithms for Submodular Function Maximization Under b-Matching Constraint (with Chien-Chung Huang).

Awards

- SWERC 2020, ACM ICPC Southwestern Europe Regional Contest. Two silver medals and one bronze medal.
- 2021, and 2022 Southwestern Europe regional round for the International Collegiate Programming Contest.

 This contest has the particularity to be a three-students team competition.
- Prologin 2019 *Prologin.* Third place. French national Computer Science contest, for students under 21. Selection relies on computer coding problems of algorithmic nature, and the final round is an artificial intelligences (bots) tournament on a game created for the event.
 - IMO 2016 International Mathematical Olympiad. Honourable mention. International mathematical competition for pre-college students. Member of the French national team.
 - CG 2016 Concours général. Mention in Mathematics.
 - BMO 2016 Balkan Mathematical Olympiad. Bronze medal.