

EDUCATION

École Polytechnique Fédérale de Lausanne (EPFL) Ph.D. student in approximation and online algorithms, Advisor: Ola Svensson.	Lausanne, Switzerland 2018–2023 (expected)
Université Paris Diderot - École Normale Supérieure Paris M.Sc. in Theoretical Computer Science (<i>summa cum laude</i>); GPA: 18.81/20 (rank: 2/63). – Thesis: “Local algorithms in graphs”, Advisor: Louis Esperet.	Paris, France 2017–2018
École polytechnique (Engineering diploma) Specialization in machine learning and algorithms.	Paris, France 2014–2018
Lycée Louis-Le-Grand, classe préparatoire MPSI/MP* Training in mathematics and physics for competitive exams to enter “Grandes écoles”. French “Baccalauréat série S” (<i>summa cum laude</i>).	Paris, France 2012–2014 Paris, France 2012







EXPERIENCE

Research internship G-SCOP Research in the G-SCOP team for combinatorial optimization. – I investigated what can or cannot be computed by local algorithms in graphs. This project led to two publications in theoretical computer science conferences.	Grenoble, France April 2018–August 2018
Research and software engineering internship, INRIA Research done in the INRIA team NANO-D. – I designed and implemented an efficient algorithm for detecting symmetries in folded protein in order to predict their interactions. The programming language was C++.	Grenoble, France March 2017–July 2017
Internship at Surrey Satellite Technology Ltd Intern in the OBDH (On-Board Data Handling) team. – I took part in analyzing circuit designs and optical devices for satellites as well as programming analysis software.	Guildford, England Summer 2017
Military Service Paris Fire Brigade, first fire group. – Team leader of a rescue team of 3 people in case of accident, dangerous disease, or fire.	Paris, France September 2014–April 2015

AWARDS AND HONORS

• NeurIPS oral presentation ($\approx 1\%$ acceptance rate)	2020
• NeurIPS spotlight presentation ($\approx 4\%$ acceptance rate)	2020
• EPFL IC School 1-year Fellowship	2018
• Citation for outstanding service in my unit during military service	2015

PUBLICATIONS

1. Étienne Bamas, Marina Drygala, and Ola Svensson, “A Simple LP-Based Approximation Algorithm for the Matching Augmentation Problem”, *to appear in 23rd Conference on Integer Programming and Combinatorial Optimization, IPCO 2022*.
2. Étienne Bamas, Marina Drygala, and Andreas Maggiori, “An Improved Analysis of Greedy for Online Steiner Forest” , 33rd *ACM-SIAM Symposium on Discrete Algorithms*, SODA 2022.
3. Étienne Bamas, Paritosh Garg, and Lars Rohwedder, “The Submodular Santa Claus Problem in the Restricted Assignment Case” , 48th *International Colloquium on Automata, Languages, and Programming*, ICALP 2021.
4. Étienne Bamas, Andreas Maggiori, and Ola Svensson, “The Primal-Dual method for Learning Augmented Algorithms” , *Advances in Neural Information Processing Systems 33*, NeurIPS 2020 (**oral presentation**).
5. Étienne Bamas, Andreas Maggiori, Lars Rohwedder, and Ola Svensson, “Learning Augmented Energy Minimization via Speed Scaling” , *Advances in Neural Information Processing Systems 33*, NeurIPS 2020 (**spotlight presentation**).
6. Étienne Bamas and Louis Esperet, “Local Approximation of the Maximum Cut in Regular Graphs” , *Graph-Theoretic Concepts in Computer Science - 45th International Workshop*, WG 2019.
7. Étienne Bamas and Louis Esperet, “Distributed Coloring of Graphs with an Optimal Number of Colors” , 36th *International Symposium on Theoretical Aspects of Computer Science*, STACS 2019.


TEACHING

- Supervision of semester projects at EPFL since 2021
Supervised students: Alexandre Reynaud (master student), Taha El Ghazi (master student).
- Teaching Assistant at EPFL 2019–now
“Algorithms” (head TA), “Theory of Computation” (head TA), “Information, Calcul, Communication”
- Teaching Assistant at Lycée Janson-de-Sailly 2017–2018
In charge of oral exams in mathematics

SKILLS AND LANGUAGES

- **Programming:** Java, C++, Python.
- **French:** Native.
- **English:** Full professional proficiency (110/120 TOEFL iBT).
- **Spanish and Mandarin:** Basics.

ACADEMIC SERVICE AND TALKS

- I co-organized the workshop ALPS 2022  on algorithms with predictions (~ 45 international participants).
- Reviewer for the conferences: MFCS 2019, WAOA 2020, ITCS 2020, NeurIPS 2021, SODA 2022, ICML 2022.
- Reviewer for the journals: *Algorithmica* (2021).
- I gave a talk at the following conferences: WG 2019, STACS 2019, NeurIPS 2020, ICALP 2021, Operations Research Bern (OR) 2021, SODA 2022.

EXTRACURRICULAR ACTIVITIES

- Fond of sports: running (I enjoy sharing my (modest) results on Strava[↗](#)), skiing, rock climbing, hiking.
- Member of EPFL emergency medical team (2019).