

## EDUCATION

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<b>École Polytechnique Fédérale de Lausanne (EPFL)</b> Ph.D. student in approximation and online algorithms, Advisor: Ola Svensson.	Lausanne, Switzerland 2018–2023 (expected)
<b>Université Paris Diderot - École Normale Supérieure Paris</b> 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
<b>École polytechnique (Engineering diploma)</b> Specialization in machine learning and algorithms.	Paris, France 2014–2018
<b>Lycée Louis-Le-Grand, classe préparatoire MPSI/MP*</b> 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

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<b>Research internship G-SCOP</b> 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
<b>Research and software engineering internship, INRIA</b> 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
<b>Internship at Surrey Satellite Technology Ltd</b> 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
<b>Military Service</b> 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

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• 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

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1. Étienne Bamas, Marina Drygala, and Ola Svensson, “A Simple LP-Based Approximation Algorithm for the Matching Augmentation Problem”, *to appear in 23<sup>rd</sup> 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” , 33<sup>rd</sup> *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” , 48<sup>th</sup> *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 - 45<sup>th</sup> International Workshop*, WG 2019.
7. Étienne Bamas and Louis Esperet, “Distributed Coloring of Graphs with an Optimal Number of Colors” , 36<sup>th</sup> *International Symposium on Theoretical Aspects of Computer Science*, STACS 2019.

## TEACHING

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- Supervision of semester projects at EPFL 2021  
*Project on learning-augmented algorithms*
- 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

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

## ACADEMIC SERVICE AND TALKS

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- Reviewer for the conferences: MFCS 2019, WAOA 2020, ITCS 2020, NeurIPS 2021, SODA 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

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- Fond of sports: running (in competition), skiing, rock climbing, hiking.
- Member of EPFL emergency medical team (2019).