

Andreas MAGGIORI

CONTACT INFORMATION

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LINKS: [!\[\]\(666e09182d4cd268646ea700ea60dcdf_img.jpg\)](#) [!\[\]\(1ef1ef0bf9af6c6996401964cf280f2d_img.jpg\)](#) [!\[\]\(e9a80c8557f9285916925bd4ac40fff5_img.jpg\)](#) [!\[\]\(88e2edecff3400e68a80dd08c57d2f9c_img.jpg\)](#)

PROFESSIONAL EXPERIENCE

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|-------------------|---|
| 10/2023 - Present | Postdoctoral Research Scientist, Columbia University
Mentors: Will Ma and Eric Balkanski |
| 05/2022-08/2022 | Research Intern, Google Zurich
Hosted by Ehsan Kazemi , I worked on efficient active learning for graphs. |
| 07/2021-10/2021 | Research Intern, Google Zurich
Hosted by Nikos Parotsidis , I worked on improving the performance of clustering algorithms. My work led to an ICML 2022 publication . |

EDUCATION

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| 09/2018-09/2023 | École Polytechnique Fédérale de Lausanne (EPFL), Switzerland
PhD in Computer Science
Thesis: Beyond worst-case analysis, with or without predictions
Advisors: Rüdiger Urbanke and Ola Svensson |
| 09/2011-10/2017 | National Technical University of Athens, Greece
Diploma (5-year joint degree; 300 ECTS),
Electrical and Computer Engineering (ECE)
Grade: 9.12 / 10 (approx. best 3%)

Thesis: Using Machine Learning Techniques to Infer
Players' Valuations in Online Ad Auctions
Advisor: Dimitris Fotakis |
| 01/2016-06/2016 | Universidad Carlos III Madrid, Spain
Erasmus Exchange Student Program |
| 09/2005-06/2011 | Lycée Léonin Nea Smirni, Greece
High School
Grade: 19.5 / 20 - Excellent |

LONG TERM RESEARCH VISITS

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|-----------------|---|
| 09/2022-11/2022 | Simons Institute for the Theory of Computing , UC Berkeley
Visiting graduate student for the program Data-Driven Decision Processes |
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RESEARCH INTERESTS

I am broadly interested in combinatorial optimization, online algorithms, machine learning and their intersection.

Currently, I am focusing on *Learning Augmented (Online) Algorithms*, where (informally) the goal is to design algorithms which provably outperform classical online algorithms when an accurate prediction about the future is available, while maintaining robustness against adversarial predictions.

PUBLICATIONS

Authors (as customary in theory) are in alphabetical order.

1. [Online and Consistent Correlation Clustering](#)
ICML 2022
[V. Cohen-Addad](#), [S. Lattanzi](#), [A. Maggiori](#), [N. Parotsidis](#)
2. [An Improved Analysis of Greedy for Online Steiner Forest](#)
SODA 2022
[É. Bamas](#), [M. Drygala](#), [A. Maggiori](#)
3. [The Primal-Dual method for Learning Augmented Algorithms](#)
NeurIPS 2020 (oral talk)
[É. Bamas](#), [A. Maggiori](#), [O. Svensson](#)
4. [Learning Augmented Energy Minimization via Speed Scaling](#)
NeurIPS 2020 (spotlight presentation)
[É. Bamas](#), [A. Maggiori](#), [L. Rohwedder](#), [O. Svensson](#)
5. [Online Matching with General Arrivals](#) **FOCS 2019**
[B. Gamlath](#), [M. Kapralov](#), [A. Maggiori](#), [O. Svensson](#), [D. Wajc](#)

THESES

- Andreas Maggiori: *Beyond worst-case analysis, with or without predictions*.
PhD Thesis, EPFL - École polytechnique fédérale de Lausanne, 2023.
- Andreas Maggiori: *Using Machine Learning Techniques to Infer Players' Valuations in Online Ad Auctions*.
Master Thesis, National Technical University of Athens (NTUA), 2018.

INVITED TALKS

06/2023	INFORMS Applied Probability Society Conference , Nancy, France
09/2022	University of Massachusetts, Amherst (UMass) , Amherst MA
06/2021	Google Zurich , Zurich, Switzerland

PROGRAMMING SKILLS

Programming Languages (Excellent):	PYTHON, C++, SQL
Programming Languages (Familiar with):	C, SML/NJ, PROLOG, MATLAB, BASH
ML Frameworks (Familiar with):	PyTorch

TEACHING EXPERIENCE

I organized a study-group on how continuous optimization methods can be used to tackle combinatorial problems. The website of the study-group with notes and recorded lectures can be found [here](#).

I co-organized the [ALPS](#) (ALgorithms with PredictionS) workshop at EPFL in May 2022, along with [Etienne Bamas](#) and [Adam Polak](#).

I was teaching assistant for the following courses:

- NTUA: Algorithms and Complexity, Discrete Mathematics
- EPFL: Theory of Computation, Machine Learning, Learning Theory, Algorithms, Advanced Probability and Applications, Foundations of Data Science

LANGUAGES

Greek (*Native*), Italian (*Native*), English (C2), French (C2), Spanish (B2)

REFERENCES

Ola Svensson: ola.svensson@epfl.ch
Rüdiger Urbanke: rudiger.urbanke@epfl.ch
Silvio Lattanzi: silviol@google.com
Vincent Cohen-Addad: cohenaddad@google.com
Nikos Parotsidis: nikosp@google.com