Andreas Maggiori

CONTACT INFORMATION

EMAIL: am6292@columbia.edu

LINKS: $\sqrt[g]{\ln}$ (7) $\stackrel{\wedge}{\cap}$

Professional Experience

10/2023-Present | Postdoctoral Research Scientist, Columbia University

Mentors: Eric Balkanski and Will Ma

05/2022-08/2022 | Research Intern, Google Zurich

Hosted by Ehsan Kazemi, I worked on abuse video detection using deep

learning and clustering techniques.

07/2021-10/2021 Research Intern, Google Zurich

Hosted by Nikos Parotsidis, I worked on improving the performance of distributed clustering algorithms. Part of this work was published

at ICML 2022.

EDUCATION

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

RESEARCH INTERESTS

I am broadly interested in data-driven decision-making under uncertainty. My work combines techniques from combinatorial optimization and machine learning with the ultimate goal of designing algorithms that outperform classical algorithms when accurate predictions about the future are available while maintaining robustness against adversarial predictions.

WORK IN PROGRESS

Authors are in alphabetical order.

1. Fair Secretaries with Unfair Predictions

Job market paper - preliminary version accepted at NeurIPS 2024

E. Balkanski, W. Ma, A. Maggiori

2. The Primal-Dual method for Learning Augmented Algorithms

preliminary version accepted as an oral talk at NeurIPS 2020

É. Bamas, A. Maggiori, O. Svensson

3. Fair and Consistent Correlation Clustering

Submitted

E. Balkanski, I. Chatzitheodorou, A. Maggiori

4. Data-Driven Solution Portfolios

Submitted

M. Drygala, S. Lattanzi, A. Maggiori, M. Stouras, O. Svensson, S. Vassilvitskii

PUBLICATIONS

Authors are in alphabetical order.

- Fair Secretaries with Unfair Predictions NeurIPS 2024
 - E. Balkanski, W. Ma, A. Maggiori
- 2. Dynamic Correlation Clustering in Sublinear Update Time ICML 2024 (spotlight presentation)
 - V. Cohen-Addad, S. Lattanzi, A. Maggiori, N. Parotsidis
- 3. Online and Consistent Correlation Clustering ICML 2022
 - V. Cohen-Addad, S. Lattanzi, A. Maggiori, N. Parotsidis
- 4. An Improved Analysis of Greedy for Online Steiner Forest SODA 2022
 - É. Bamas, M. Drygala, A. Maggiori
- 5. The Primal-Dual method for Learning Augmented Algorithms NeurIPS 2020 (oral talk)
 - É. Bamas, A. Maggiori, O. Svensson
- 6. Learning Augmented Energy Minimization via Speed Scaling

NeurIPS 2020 (spotlight presentation)

- É. Bamas, A. Maggiori, L. Rohwedder, O. Svensson
- Online Matching with General Arrivals FOCS 2019
 - B. Gamlath, M. Kapralov, A. Maggiori, O. Svensson, D. Wajc

INVITED TALKS

* Scheduled

Scheduled		
11/2024*	Drexel University, USA	
11/2024*	University of Massachusetts, Amherst (UMass), USA	
10/2024*	Yale SOM Operations Seminar, Yale University, USA	
10/2024*	NYU Theory Seminar, New York University, USA	
09/2024	Rutgers/DIMACS Theory of Computing Seminar, Rutgers University, USA	
07/2024	INFORMS Revenue Management and Pricing Section Conference, UCLA, USA	
07/2024	Workshop on algorithms with predictions, Columbia University, USA	
06/2024	INFORMS Workshop on Market Design, Yale University, USA	
06/2023	INFORMS Applied Probability Society Conference, Nancy, France	
09/2022	University of Massachusetts, Amherst (UMass), USA	
09/2022	Simons Institute for the Theory of Computing, UC Berkeley, USA	
06/2021	Google Zurich, Switzerland	

AWARDS

2017:	1st in the NTUA hub at the Google Hashcode programming competition
	(170 in the world) with the team <i>Veni Vidi Vsync</i>
2013:	Bronze medal at SEEMOUS (South Eastern European Mathematical Olympiad for
	University Students) competition [results]
2010:	Bronze medal in the Euclid phase of high school mathematics competition
	organized by the Hellenic Mathematical Society
2008, 2010:	Twice finalist in the Archimedes high school mathematics competition
	organized by the Hellenic Mathematical Society

LANGUAGES