Alexandros Tsigonias-Dimitriadis

CONTACT INFORMATION	European Central Bank, Sonnemannstr. 20, 60314 Frankfurt am Main, Germany alexandrostsigdim@gmail.com	+30 6979630917 https://alextsigonias.github.io/

RESEARCH INTERESTS

Economics and Computation, Market Design, Sequential Decision-Making, Pricing and Revenue Management, Fairness in Resource Allocation, Data-Driven Algorithm Design, Algorithmic Game Theory, Machine Learning

EMPLOYMENT

European Central Bank, Germany   July 2023 - now
PhD trainee in Analytics & Research, DG-Communications
- Working with a variety of datasets and statistical methods to inform and evaluate the ECB's policy communication strategies.
- Carrying out research projects – for example, on how to improve people's knowledge of and attitudes towards the ECB.

Universidad de Chile, Chile   Aug. 2022 - July 2023
Postdoctoral Researcher, Department of Industrial Engineering
Information and Computation in Market Design (ICMD) Group
- Worked on projects at the intersection of computer science and economics. Topics revolved around the topic of resource allocation and included fairness considerations in recommendation systems and optimization aspects of political apportionment.
- Collaborated with researchers from academia and industry.

EDUCATION

Technical University of Munich, Germany   Sept. 2018 - July 2022
Ph.D., TUM School of Computation, Information and Technology
Completed the interdisciplinary PhD program as member of the AdONE (Advanced Optimization in a Networked Economy) and Operations Research Groups
Thesis: Lotteries, Prophets, and Pandora's Box: A New Take on Classic Problems in Mechanism Design and Online Selection
Advisor: Prof. Andreas S. Schulz

National Technical University of Athens, Greece   Oct. 2012 - June 2018
Diploma in Electrical and Computer Engineering (5-year joint degree)
GPA: 8.88/10 (top 5%)
Major in Computer Science, Minor in Mathematics & Computer Networks
Thesis: Analysis of Opinion Formation Dynamics using Convex Optimization Techniques
Advisor: Prof. Dimitris Fotakis

Technical University of Munich, Germany   Apr. - Sept. 2016
Erasmus semester, Department of Electrical and Computer Engineering

RESEARCH VISITS

Google Research, Switzerland   May - July 2023
Main topic: Online decision-making and matching algorithms with applications in pricing
Host: Dr. Paul Duetting

Sapienza Università di Roma, Italy   Mar. 2022
Host: Prof. Stefano Leonardi

	Universidad de Chile, Chile	Nov. - Dec. 2019
	Host: Prof. José Correa	

JOURNAL ARTICLES
(Authors are listed alphabetically)

Robust Revenue Maximization Under Minimal Statistical Information
Yiannis Giannakopoulos, Diogo Poças, Alexandros Tsigonias-Dimitriadis
ACM Transactions on Economics and Computation (**ACM TEAC**) 2022
An extended abstract appeared in *WINE'20*

The Secretary Problem with Independent Sampling
José Correa, Andrés Cristi, Laurent Feuilloley, Tim Oosterwijk, Alexandros Tsigonias-Dimitriadis
Minor Revision, **Management Science**
A preliminary version appeared in *SODA'21*

CONFERENCE PUBLICATIONS
(Authors are listed alphabetically)

Prophet Inequalities via the Expected Competitive Ratio
Tomer Ezra, Stefano Leonardi, Rebecca Reiffenhäuser, Matteo Russo, Alexandros Tsigonias-Dimitriadis
19th Conference on Web and Internet Economics (**WINE'23**), to appear

Prophet Secretary Against the Online Optimal
Paul Dütting, Evangelia Gergatsouli, Rojin Rezvan, Yifeng Teng, Alexandros Tsigonias-Dimitriadis
24th ACM Conference on Economics and Computation (**EC'23**)

The Secretary Problem with Independent Sampling
José Correa, Andrés Cristi, Laurent Feuilloley, Tim Oosterwijk, Alexandros Tsigonias-Dimitriadis
32nd ACM-SIAM Symposium on Discrete Algorithms (**SODA'21**)

Robust Revenue Maximization Under Minimal Statistical Information
Yiannis Giannakopoulos, Diogo Poças, Alexandros Tsigonias-Dimitriadis
16th Conference on Web and Internet Economics (**WINE'20**)

SUBMITTED & WORKING PAPERS

Online Policies for Content Recommendation with Fairness Constraints
José Correa, Émile Naquin, Nicolás Stier-Moses, Alexandros Tsigonias-Dimitriadis, Victor Verdugo
Working paper

Political Apportionment: The Power of Divisor Methods and Randomization
Javier Cembrano, José Correa, Alexandros Tsigonias-Dimitriadis, Ulrike Schmidt-Kraepelin, Victor Verdugo
In preparation for submission

Prophet Secretary Against the Online Optimal
Paul Dütting, Evangelia Gergatsouli, Rojin Rezvan, Yifeng Teng, Alexandros Tsigonias-Dimitriadis
Submitted journal version

Preference Elicitation in Combinatorial Auctions: An Improved Approach using Reinforcement Learning
Eleni Batziou, Giorgos Bouritsas, Alexandros Tsigonias-Dimitriadis
Working paper

AWARDS & SCHOLARSHIPS

COST Action STSM Grant 2022
Funding from the COST Action for research visit at the Sapienza University of Rome

DFG-AdONE start-up funding   2021-22
Funding from the German Research Foundation (DFG) for talented early career researchers

IGSSE PhD Scholarship   2018-21

CODING &   Programming: Python (fluent), R, C++, C, SQL, Matlab (familiar with)
SOFTWARE   Software and Tools: Gurobi, Git, LaTeX, Mathematica, PyTorch, Tableau

PROFESSIONAL *Conference & Journal reviewing*: NeurIPS'23, ICML'23, Math. Programming
SERVICE   *Conference subreviewing*: COLT'23, IPCO'23, SODA'23, SAGT'22, EC'22
              Volunteer, STOC 2022
              Organizer of the AdONE research group retreat   2020

SELECTED TALKS   *Prophet Secretary Against the Online Optimal*
& POSTERS   Workshop on Algorithms, Learning, and Games (ALGA)   June 2023

                 Prophet Inequalities via the Expected Competitive Ratio
                 ACGO Seminar, Universidad de Chile   Aug. 2022

                 The Secretary Problem with Independent Sampling
                 Workshop on Algorithms for Learning and Economics (WALE)   June 2022
                 INFORMS Annual Meeting   Oct. 2021

                 Robust Revenue Maximization Under Minimal Statistical Information
                 16th Conference on Web and Internet Economics (WINE)   Dec. 2020

TEACHING   Technical University of Munich, Germany
EXPERIENCE   *Teaching Assistant*, Special Topics in Algorithmic Game Theory   Spring 2019
              Co-supervisor of two Master theses

              National Technical University of Athens, Greece
              Teaching Assistant, Algorithms and Complexity   Fall 2017

              Private Tutor, Athens, Greece   2013 - 2016
              Mathematics and Physics for high school students

LANGUAGES   English (fluent), Greek (native), Spanish (fluent), German (advanced), French (basic)