## **Alexandros Tsigonias-Dimitriadis**

CONTACT INFORMATION

Department of Industrial Engineering, Republica 701, Santiago, Chile

alexandrostsigdim@gmail.com | +56 982808-251

https://alextsigonias.github.io/

RESEARCH INTERESTS

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

**EMPLOYMENT** 

Universidad de Chile, Chile

Aug. 2022 - Aug. 2023

**Postdoctoral Researcher**, Department of Industrial Engineering Information and Computation in Market Design (ICMD) Group

Host: Prof. José R. Correa

**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 Opti-

mization in a Networked Economy) and the Operations Research Groups Thesis: Lotteries, Prophets, and Pandora's Box: A New Take on Classic Problems in Mech-

anism 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

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)

An extended abstract appeared in WINE'20

2022

CONFERENCE PUBLICATIONS (Authors are listed alphabetically) 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)

UNDER	
REVIEW	

The Secretary Problem with Independent Sampling

José Correa, Andrés Cristi, Laurent Feuilloley, Tim Oosterwijk, Alexandros Tsigonias-Dimitriadis

Under Review after Major Revision, Management Science

A preliminary version appeared in SODA'21

Political Apportionment: Ex-ante Proportionality and Monotonicity Through the Lens of

Linear Programming

Javier Cembrano, José Correa, Alexandros Tsigonias-Dimitriadis, Victor Verdugo

Submitted

WORKING PAPERS Prophet Inequalities via the Expected Competitive Ratio

Tomer Ezra, Stefano Leonardi, Rebecca Reiffenhäuser, Matteo Russo, Alexandros Tsigonias-

Dimitriadis
Working paper

Preference Elicitation in Combinatorial Auctions: An Improved Approach using Reinforcement

Learning

Eleni Batziou, Giorgos Bouritsas, Alexandros Tsigonias-Dimitriadis

Working paper

Online Policies for Content Recommendation with Fairness Constraints

José Correa, Émile Naquin, Nicolás Stier-Moses, Alexandros Tsigonias-Dimitriadis, Victor

Verdugo
Working paper

RESEARCH VISITS Google Research, Switzerland

May - July 2023

Topic: Online decision-making 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

AWARDS & SCHOLARSHIPS

COST Action STSM Grant

2022

ARSHIPS Funding from the COST Action for research visit at the Sapienza University of Rome

**DFG-AdONE** start-up funding

2021-2

Funding from the German Research Foundation (DFG) for talented early career researchers

IGSSE PhD Scholarship

2018-21

SELECTED TALK & POSTERS

SELECTED TALKS 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), Poster

**INFORMS** Annual Meeting

June 2022 Oct. 2021

Robust Revenue Maximization Under Minimal Statistical Information

16th Conference on Web and Internet Economics (WINE)

Dec. 2020

COMPUTER Programming: Python (fluent), R, C++, C, Matlab (familiar with)

SKILLS Software and Tools: Gurobi, Git, LATEX, Mathematica (fluent), PyTorch (familiar with)

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

PROFESSIONAL Conference reviewing: NeurlPS'23, ICML'23

SERVICE Conference subreviewing: COLT'23, IPCO'23, SODA'23, SAGT'22, EC'22

Volunteer, STOC 2022

Organizer of the AdONE research group retreat 2020

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

OTHER Member of IEEE, NTUA Student Branch 2015-16

ACTIVITIES Volunteer, The Smile of the Child (NGO) 2015-16

Hobbies: Piano, Reading, Cycling