

**Duration:** 2 days - July 15-16, 2025

Place: Athens University of Economics and Business (AUEB), Athens, Greece

https://tinyurl.com/5c7pdyzm

#### **Event webpage:**

https://archimedesai.gr/en/events/archimedes-2025-workshop-on-foundations-of-modern-ai

## Registration link here:

https://docs.google.com/forms/d/1tsMVhUrvHA-LQitlnz0i3EH7dU-p3o45HEkgBVPTpyY/edit

## Day 1 (Tuesday, July 15):

9:00 - 9:20:

Welcome & Registration

9:20 - 9:30:

#### **Opening Remarks**

9.30 - 10.30:

**Tutorial 1, part 1** - "Who Gets What? Fair Division of Indivisible Goods"

**Kurt Mehlhorn**, Director Emeritus of the *Max Planck Institute for Informatics, The Max Planck Society* for the Advancement of Science, Germany, and Senior Professor of Computer Science, Saarland University, Germany

10.30 - 11.00:

Coffee Break

11.00 - 11.30:

**Talk 1** - "Proportional Fairness in Non-Centroid Clustering"

**Ioannis Caragiannis**, Professor at the Department of Computer Science, *Aarhus University, Denmark*, and Head of the *Computational Complexity & Game Theory research group* 

11.30 – 12.00:

**Talk 2** - "Utilitarian Distortion with Predictions"

**Alexandros Voudouris**, Associate Professor at the School of Computer Science and Electronic Engineering, *University of Essex*, *UK* 

12.00 - 12.30:

<u>Talk 3</u> - "Online Combinatorial Allocation with Interdependent Values"

**Rebecca Reiffenhäuser**, Assistant Professor for Theoretical Computer Science, *University of Amsterdam, The Netherlands*, and Member of the *Institute for Logic, Language and Computation* 

12.30 - 2.00:

Lunch (Catered)

2.00 - 3.00:

Tutorial 2, part 1 - "Total Search Problems in Algorithmic Game Theory"

Paul Goldberg, Professor of Computer Science, Oxford University (Brasenose College), UK

3.00 - 3.30:

<u>Talk 4</u> - "Improved Last-Iterate Convergence Rates for Bilinear Zero-Sum Games"

**Michail Fasoulakis**, Lecturer (Assistant Professor) in Theoretical Computer Science, *Royal Holloway, University of London, UK*, and Affiliated/Corresponding Scientist of Abroad at *ICS-FORTH, Greece* 

3.30 - 4.00:

Coffee Break

4.00 - 5.00:

<u>Tutorial 3, part 1</u> - "Online Learning & Markets"

**Stefano Leonardi**, Professor at the Department of Computer, Control & Management Engineering, *Sapienza Università di Roma, Italy* 

5.00 - 5.10:

Short Break

5.10 - 5.40:

Talk 5 - "Airdrop Games"

Paolo Penna, Research Fellow at Input Output Global (IOG)

5.40 - 6.10:

Talk 6 - "Algorithmic Monetary Policies for Blockchain Participation Games"

**Carmine Ventre**, Professor of Computer Science, and Chair in Computational Finance, and Director of Informatics Finance Hub, and Interim Head of the Department of Informatics, *King's College London, UK* 

# Day 2 (Wednesday, July 16):

9.00 – 9.30:

Welcome

9.30 - 10.30:

Tutorial 3, part 2 - "Online Learning & Markets"

Federico Fusco, Assistant Professor, Sapienza Università di Roma, Italy

10.30 – 11.00:

Coffee Break

11.00 – 11.30:

<u>Talk 7</u> - "Solving Neural Min-Max Games: The Role of Architecture, Initialization & Dynamics" **Manolis Vlatakis**, Assistant Professor in the Department of Computer Sciences, University of Wisconsin-Madison, USA & Affiliated Researcher at Archimedes, Athena Research Center, Greece

11.30 – 12.00:

<u>Talk 8</u> - "Learning with Systematic Bias and Imperfect Data"

**Alkis Kalavasis**, Postdoctoral Fellow at the Institute for Foundations of Data Science (FDS), *Yale University, USA* 

12.00 - 12.30:

Talk 9 - "Solving Hidden Monotone Variational Inequalities with Surrogate Losses"

**Ioannis Mitliagkas**, Associate Professor in the Department of Computer Science and Operations Research (DIRO), *Université de Montréal, Canada* and Staff Research Scientist at *Google DeepMind Montréal, Canada* and Affiliated Researcher at *Archimedes, Athena Research Center, Greece* 

12.30 - 2.00:

*Lunch* (Catered)

2.00 - 3.00:

Tutorial 1, part 2 - "Who Gets What? Fair Division of Indivisible Goods"

**Kurt Mehlhorn**, Director Emeritus of the *Max Planck Institute for Informatics, The Max Planck Society* for the Advancement of Science, Germany and Senior Professor of Computer Science, Saarland University, Germany

3.00 - 3.30:

 $\underline{\textbf{Talk 10}} \text{ - "On Recent Advances in Computational Complexity of Team Games and Beyond"}$ 

**Ioannis Panageas**, Assistant Professor at the School of Information & Computer Science, *University of California, Irvine, USA* and Director of *The Games, Optimization, Algorithms, and Learning Lab (GOALLab)* and Lead Researcher at *Archimedes, Athena Research Center, Greece* 

3:30 - 4.00: Coffee Break

4.00 - 5.00:

**Tutorial 2, part 2** - "Total Search Problems in Algorithmic Game Theory" Paul Goldberg, Professor of Computer Science, Oxford University (Brasenose College), UK

5.00 - 5.30:

**Talk 11** - "Algorithmic Foundations for Contrastive Embeddings"

Vaggos Chatziafratis, Assistant Professor of Computer Science & Engineering, University of California, Santa Cruz, USA and Affiliated Researcher at Archimedes, Athena Research Center, Greece

## **Organizing & Scientific Committee**

- Georgios Amanatidis, Assistant Professor at the Department of Informatics of the Athens University of Economics and Business (AUEB), Greece, and Lead Researcher at Archimedes, Athena Research Center, Greece
- Georgios Christodoulou, Associate Professor in the School of Informatics at the Aristotle University of Thessaloniki (AUTh), Greece, and Lead Researcher at Archimedes, Athena Research Center, Greece
- Dimitris Fotakis, Professor at the School of Electrical and Computer Engineering, National Technical University of Athens (NTUA), Greece, and Lead Researcher at Archimedes, Athena Research Center, Greece
- Evangelos Markakis, Professor at the Department of Informatics of the Athens University of Economics and Business (AUEB), Greece, and Lead Researcher at Archimedes, Athena Research Center, Greece
- Alkmini Sqouritsa, Assistant Professor at the Department of Informatics of the Athens University of Economics and Business (AUEB), Greece, and Lead Researcher at Archimedes, Athena Research Center, Greece

## **Co-Organizers**





