# Alexandros A. Voudouris

School of Computer Science and Electronic Engineering, University of Essex Colchester Campus, CO4 3SQ, UK

#### Research interests

- Approximation Algorithms
- · Algorithmic Mechanism Design
- Computational Social Choice
- Fair resource allocation

# **Academic positions**

- Associate Professor (October 2023 )
   School of Computer Science and Electronic Engineering (CSEE), University of Essex, UK
- Assistant Professor (April 2020 September 2023)
   School of Computer Science and Electronic Engineering (CSEE), University of Essex, UK
- Postdoctoral researcher (October 2018 March 2020)
   Department of Computer Science, University of Oxford, UK

#### Notable academic admin roles

School of Computer Science and Electronic Engineering (CSEE), University of Essex, UK:

- Director of Centre for Computational Finance and Economic Agents (August 2024 )
- Undergraduate Theme Lead (Computer Science) (September 2023 )
  - Deputy Director of Curriculum Development for the undergraduate Computer Science theme (BSc Computer Science, Computer Games, Artificial Intelligence)
- Postgraduate Theme Lead (Computational Finance) (September 2023 )
  - Deputy Director of Curriculum Development for the postgraduate Computational Finance theme (MSc Computational Finance, Algorithmic Trading, Artificial Intelligence in Finance, Financial Technology)
- Director of Admissions for Computational Finance (July 2021 )

#### Education

- **PhD** in Computer Science and Technology (December 2014 September 2018)

  Department of Computer Engineering and Informatics, University of Patras, Greece
  Thesis: *Design and analysis of algorithms for non-cooperative environments*Advisor: Ioannis Caragiannis
- MSc in Computer Science and Technology (September 2013 February 2015)
  Department of Computer Engineering and Informatics, University of Patras, Greece

Thesis: On the efficiency of divisible resource allocation mechanisms

Advisor: Ioannis Caragiannis

GPA: 9.8/10 (top 1%)

• Diploma in Computer Engineering and Informatics (September 2008 – July 2013)

University of Patras, Greece

Thesis: Search algorithms for natural deduction proofs

Advisor: Stavros Cosmadakis

GPA: 8.39/10 (best GPA in my class of approximately 250 students)

#### Grants

#### Knowledge Transfer Partnership (KTP) grant with Broody Limited

· Principal Investigator and Academic Supervisor

- · Funded by Innovate UK and Broody
- Project title: To create innovative, AI-driven tools and services that empower entrepreneurs, while expanding the capacity and knowledge base of the UK's leading business incubator and accelerator
- Budget (FEC): £275, 757
- Duration: 30 months (July 2024 December 2026)

#### Accelerated Knowledge Transfer (AKT) grant with Atom Bank

- Principal Investigator and Academic Supervisor
- · Funded by Innovate UK and Atom Bank
- Project title: Analysing the behaviour of Atom Bank's customers with respect to changes in competitors' interest rates
- Budget (FEC): £49, 500
- Duration: 4 months (March July 2024)

#### Short Term Scientific Mission Grant to visit University of Patras

- Funded by COST Action CA16228 (European Network for Game Theory)
- Project title: Mechanism design and equilibrium analysis of learning algorithms
- Budget: €1,000
- Duration: 2 weeks (September 2019)

#### PhD Scholarship by the Alexander S. Onassis Foundation

- Scholarship won through proposal competition
- Project title: Algorithm design and analysis for non-cooperative environments
- Budget: €14, 400
- Duration: 24 months (October 2016 September 2018).

#### Short Term Scientific Mission Grant to visit University of Oxford

• Funded by COST Action IC1205 (Computational Social Choice)

• Project title: The optimal parliament problem

• Budget: €1, 200

• Duration: 2 weeks (February 2015)

# Participation in research projects

• (10/2018 – 03/2020) ERC ACCORD Project "Algorithms for Complex Collective Decisions on Structured Domains" (639945)

PI: Prof Edith Elkind

- (10/2014 09/2016) Caratheodory 2013 basic research project E.114 (named researcher) PI: Prof Ioannis Caragiannis
- (4/2014 09/2014) THALES Basic Research Project on Algorithmic Game Theory (AGT) PI: Prof Paul Spirakis

# Journal paper publications

(in all publications, authors are ordered alphabetically)

#### [J44] The price of EF1 for few agents with additive ternary valuations

M. Kyropoulou and A. A. Voudouris *Operations Research Letters*, volume 63, article 107351, 2025

#### [J43] Diversity-seeking jump games on networks

L. Narayanan, Y. Sabbagh, and A. A. Voudouris *Autonomous Agents and Multi-Agent Systems*, volume 39, article 32, 2025

# [J42] Mechanism design with predictions for facility location games with candidate locations

J. Fang, Q. Fang, W. Liu, Q. Nong, and A. A. Voudouris *Journal of Combinatorial Optimization*, volume 49, article 74, 2025

#### [J41] Improved metric distortion via threshold approvals

E. Anshelevich, A. Filos-Ratsikas, C. Jerrett, and A. A. Voudouris *Artificial Intelligence*, volume 341, article 104295, 2025

#### [J40] Metric distortion of distributed obnoxious voting

A. A. Voudouris

Information Processing Letters, volume 189, article 106559, 2025

#### [J39] Agent-constrained truthful facility location games

A. Deligkas, M. Lotfi, and A. A. Voudouris *Journal of Combinatorial Optimization*, volume 49, article 24, 2025

#### [J38] Truthful two-facility location with candidate locations

P. Kanellopoulos, A. A. Voudouris, and R. Zhang *Theoretical Computer Science*, volume 1024, article 114913, 2025

#### [J37] Revisiting the distortion of distributed voting

A. Filos-Ratsikas and A. A. Voudouris *Theory of Computing Systems*, volume 68, pages 1138–1159, 2024

#### [J36] Truthful interval covering

A. Deligkas, A. Filos-Ratsikas, and A. A. Voudouris

Autonomous Agents and Multi-Agent Systems (JAAMAS), volume 38, article 41, 2024

#### [J35] The distortion of distributed facility location

A. Filos-Ratsikas, P. Kanellopoulos, A. A. Voudouris, and R. Zhang *Artificial Intelligence*, volume 328, article 104066, 2024

#### [J34] On truthful constrained facility location with max-variant cost

M. Lotfi and A. A. Voudouris

Operations Research Letters, volume 52, article 107060, 2024

#### [J33] Don't roll the dice, ask twice: The two-query distortion of matching problems and beyond

G. Amanatidis, G. Birmpas, A. Filos-Ratsikas, and A. A. Voudouris

SIAM Journal on Discrete Mathematics, volume 38(1), pages 1007-1029, 2024

#### [J32] Truthful ownership transfer with expert advice

I. Caragiannis, A. Filos-Ratsikas, S. Nath, and A. A. Voudouris *Mathematical Programming*, volume 203, pages 871–900, 2024

#### [J31] Not all strangers are the same: The effect of tolerance in Schelling games

P. Kanellopoulos, M. Kyropoulou, and A. A. Voudouris

Theoretical Computer Science, volume 971, article 114065, 2023

#### [J30] Fair division of indivisible goods: Recent progress and open questions

G. Amanatidis, H. Aziz, G. Birmpas, A. Filos-Ratsikas, B. Li, H. Moulin, A. A. Voudouris, and X. Wu *Artificial Intelligence*, volume 322, article 103965, 2023

#### [J29] Tight distortion bounds for distributed metric voting on a line

A. A. Voudouris

Operations Research Letters, volume 51(3), pages 266–269, 2023

#### [J28] Heterogeneous facility location with limited resources

Argyrios Deligkas, A. Filos-Ratsikas, and A. A. Voudouris

Games and Economic Behavior, volume 139, pages 200-215, 2023

#### [J27] On discrete truthful heterogeneous two-facility location

P. Kanellopoulos, A. A. Voudouris, and R. Zhang

SIAM Journal on Discrete Mathematics, volume 37(2), pages 779–799, 2023

#### [J26] The metric distortion of multiwinner voting

I. Caragiannis, N. Shah, and A. A. Voudouris

Artificial Intelligence, volume 313, article 103802, 2022

#### [J25] Multi-Agent Systems for Computational Economics and Finance

M. Kampouridis, P. Kanellopoulos, M. Kyropoulou, T. Melissourgos, and A. A. Voudouris *AI Communications*, volume 35(4), pages 369-380, 2022

#### [124] The distortion of distributed metric social choice

E. Anshelevich, A. Filos-Ratsikas, and A. A. Voudouris

Artificial Intelligence, volume 208, article 103713, 2022

# [J23] A few queries go a long way: Information-distortion tradeoffs in matching

 $G.\ Amanatidis,\ G.\ Birmpas,\ A.\ Filos-Ratsikas,\ and\ A.\ A.\ Voudour is$ 

Journal of Artificial Intelligence Research, volume 74, pages 227-261, 2022

#### [J22] Bounding the inefficiency of compromise in opinion formation

I. Caragiannis, P. Kanellopoulos, and A. A. Voudouris *Algorithmica*, volume 84(1), pages 234–271, 2022

#### [J21] Optimally deceiving a learning leader in Stackelberg games

G. Birmpas, J. Gan, A. Hollender, F. J. Marmolejo-Cossio, N. Rajgopal, and A. A. Voudouris *Journal of Artificial Intelligence Research*, volume 72, pages 507–531, 2021

#### [J20] Distortion in Social Choice Problems: An annotated reading list

E. Anshelevich, A. Filos-Ratsikas, N. Shah, and A. A. Voudouris *SIGecom Exchanges*, volume 19(1), pages 12–14, 2021

#### [J19] Schelling games on graphs

A. Agarwal, E. Elkind, J. Gan, A. Igarashi, W. Suksompong, and A. A. Voudouris *Artificial Intelligence*, volume 301, article 103576, 2021

#### [J18] Modified Schelling games

P. Kanellopoulos, M. Kyropoulou, and A. A. Voudouris *Theoretical Computer Science*, volume 880, pages 1–19, 2021

#### [J17] Welfare guarantees in Schelling segregation

M. Bullinger, W. Suksompong, and A. A. Voudouris *Journal of Artificial Intelligence Research*, volume 71, pages 143–174, 2021

#### [J16] Peeking behind the ordinal curtain: Improving distortion via cardinal queries

G. Amanatidis, G. Birmpas, A. Filos-Ratsikas, and A. A. Voudouris *Artificial Intelligence*, volume 296, article 103488, 2021

#### [J15] Maximum Nash welfare and other stories about EFX

G. Amanatidis, G. Birmpas, A. Filos-Ratsikas, A. Hollender, and A. A. Voudouris *Theoretical Computer Science*, volume 863, pages 69–85, 2021

#### [J14] The efficiency of resource allocation mechanisms for budget-constrained users

I. Caragiannis and A. A. Voudouris

Mathematics of Operations Research, volume 46(2), pages 503-523, 2021

#### [J13] Protecting elections by recounting ballots

E. Elkind, J. Gan, S. Obraztsova, Z. Rabinovich, and A. A. Voudouris *Artificial Intelligence*, volume 290, article 103401, 2021

#### [J12] Simple combinatorial auctions with budget constraints

A. A. Voudouris

Theoretical Computer Science, volume 842, pages 6-17, 2020

#### [J11] Almost envy-freeness in group resource allocation

M. Kyropoulou, W. Suksompong, and A. A. Voudouris *Theoretical Computer Science*, volume 841, pages 110–123, 2020

#### [J10] How effective can simple ordinal peer grading be?

I. Caragiannis, G. A. Krimpas, and A. A. Voudouris ACM Transactions on Economics and Computation, volume 8, issue 3, article 16, 2020 Special issue on selected papers from EC 2016

#### [J9] The distortion of distributed voting

A. Filos-Ratsikas, E. Micha, and A. A. Voudouris *Artificial Intelligence*, volume 286, article 103343, 2020

# [J8] Energy-aware tree network formation among computationally weak nodes

A. Madhja, S. Nikoletseas, and A. A. Voudouris

Computer Networks, volume 168, article 107068, 2020

#### [J7] Envy-freeness in house allocation problems

J. Gan, W. Suksompong, and A. A. Voudouris

Mathematical Social Sciences, volume 101, pages 104–106, 2019

#### [J6] Adaptive wireless power transfer in ad hoc networks

A. Madhja, S. Nikoletseas, and A. A. Voudouris *Computer Networks*, volume 152, pages 87–97, 2019

#### [J5] A note on the efficiency of position mechanisms with budget constraints

A. A. Voudouris

Information Processing Letters, volume 143, pages 28-33, 2019

#### [J4] Optimizing positional scoring rules for rank aggregation

I. Caragiannis, X. Chatzigeorgiou, G. A. Krimpas, and A. A. Voudouris *Artificial Intelligence*, volume 267, pages 58–77, 2019

#### [J3] Near-optimal asymmetric binary matrix partitions

F. Abed, I. Caragiannis, and A. A. Voudouris *Algorithmica*, volume 80(1), pages 48–72, 2018

#### [J2] Efficiency and complexity of price competition among single-product vendors

I. Caragiannis, X. Chatzigeorgiou, P. Kanellopoulos, G. A. Krimpas, N. Protopapas, A. A. Voudouris *Artificial Intelligence*, volume 248, pages 9–25, 2017

#### [J1] Welfare guarantees for proportional allocations

I. Caragiannis and A. A. Voudouris *Theory of Computing Systems*, volume 59(4), pages 581–599, 2016 Special issue on selected papers from SAGT 2014/2015

# Conference paper publications

#### [C46] Truthful facility location with candidate locations and limited resources

P. Kanellopoulos and A. A. Voudouris 28th European Conference on Artificial Intelligence (ECAI), 2025

#### [C45] Constrained truthful obnoxious two-facility location with optional preferences

P. Kanellopoulos and A. A. Voudouris
18th International Symposium on Algorithmic Game Theory (SAGT), 2025

#### [C44] Metric distortion under group-fair objectives

G. Amanatidis, E. Anshelevich, C. Jerrett, and A. A. Voudouris

18th International Symposium on Algorithmic Game Theory (SAGT), 2025

#### [C43] Utilitarian distortion with predictions

A. Filos-Ratsikas, G. Kalantzis, and A. A. Voudouris 26th ACM Conference on Economics and Computation (EC), 2025

#### [C42] Optimal metric distortion for matching on the line

A. Filos-Ratsikas, V. Gkatzelis, M. Latifian, E. Rewinski, and A. A. Voudouris 34th International Joint Conference on Artificial Intelligence (IJCAI), 2025

#### [C41] Variety-seeking jump games on graphs

L. Narayanan, J. Opatrny, S. Tummala, and A. A. Voudouris

34th International Joint Conference on Artificial Intelligence (IJCAI), 2025

#### [C40] Agent-constrained truthful facility location games

A. Deligkas, M. Lotfi, and A. A. Voudouris

17th Symposium on Algorithmic Game Theory (SAGT), 2024

#### [C39] The distortion of threshold approval matching

M. Latifian and A. A. Voudouris

33rd International Joint conference on Artificial Intelligence (IJCAI), 2024

#### [C38] Truthful interval covering

A. Deligkas, A. Filos-Ratsikas, and A. A. Voudouris

33rd International Joint conference on Artificial Intelligence (IJCAI), 2024

#### [C37] Improved metric distortion via threshold approvals

E. Anshelevich, A. Filos-Ratsikas, C. Jerrett, A. A. Voudouris 38th AAAI Conference on Artificial Intelligence (AAAI), 2024

#### [C36] Truthful two-facility location with candidate locations

P. Kanellopoulos, A. A. Voudouris, and R. Zhang 16th International Symposium on Algorithmic Game Theory (SAGT), 2023

#### [C35] Settling the distortion of distributed facility location

A. Filos-Ratsikas, P. Kanellopoulos, A. A. Voudouris, and R. Zhang 22nd International Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2023

#### [C34] Revisiting the distortion of distributed voting

A. Filos-Ratsikas and A. A. Voudouris
22nd International Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2023

# [C33] **Don't roll the dice, ask twice: The two-query distortion of matching problems and beyond** G. Amanatidis, G. Birmpas, A. Filos-Ratsikas, and A. A. Voudouris

36th Conference on Neural Information Processing Systems (NeurIPS), 2022

# [C32] Not all strangers are the same: The effect of tolerance in Schelling games

P. Kanellopoulos, M. Kyropoulou, and A. A. Voudouris 47th International Symposium on Mathematical Foundations of Computer Science (MFCS), 2022

#### [C31] On discrete truthful heterogeneous two-facility location

P. Kanellopoulos, A. A. Voudouris, and R. Zhang 31st International Joint Conference on Artificial Intelligence (IJCAI), 2022

#### [C30] Fair division of indivisible goods: A survey

G. Amanatidis, G. Birmpas, A. Filos-Ratsikas, and A. A. Voudouris 31st International Joint Conference on Artificial Intelligence (IJCAI), 2022

#### [C29] Optimizing mixed-asset portfolios involving REITs

F. Z. Habbab, M. Kampouridis, and A. A. Voudouris

IEEE Symposium on Computational Intelligence for Financial Engineering and Economics (CIFEr), 2022

#### [C28] The metric distortion of multiwinner voting

I. Caragiannis, N. Shah, and A. A. Voudouris 36th AAAI Conference on Artificial Intelligence (AAAI), 2022

#### [C27] Heterogeneous facility location with limited resources

Argyrios Deligkas, A. Filos-Ratsikas, and A. A. Voudouris

36th AAAI Conference on Artificial Intelligence (AAAI), 2022

#### [C26] The distortion of distributed social choice

E. Anshelevich, A. Filos-Ratsikas, and A. A. Voudouris 17th Conference on Web and Internet Economics (WINE), 2021

# [C25] Approximate mechanism design for distributed facility location

A. Filos-Ratsikas and A. A. Voudouris

14th International Symposium on Algorithmic Game Theory (SAGT), 2021

#### [C24] Distortion in social choice problems: The first 15 years and beyond (survey)

E. Anshelevich, A. Filos-Ratsikas, N. Shah, and A. A. Voudouris 30th International Joint Conference on Artificial Intelligence (IJCAI), 2021

#### [C23] A few queries go a long way: Information-distortion tradeoffs in matching

G. Amanatidis, G. Birmpas, A. Filos-Ratsikas, and A. A. Voudouris 35th AAAI Conference on Artificial Intelligence (AAAI), 2021

#### [C22] Welfare guarantees in Schelling segregation

M. Bullinger, W. Suksompong, and A. A. Voudouris 35th AAAI Conference on Artificial Intelligence (AAAI), 2021

#### [C21] Optimally deceiving a learning leader in Stackelberg games

G. Birmpas, J. Gan, A. Hollender, F. J. Marmolejo-Cossio, N. Rajgopal, and A. A. Voudouris 34th Conference on Neural Information Processing Systems (NeurIPS), 2020

#### [C20] Modified Schelling games

P. Kanellopoulos, M. Kyropoulou, and A. A. Voudouris
13th International Symposium on Algorithmic Game Theory (SAGT), 2020

#### [C19] Maximum Nash welfare and other stories about EFX

G. Amanatidis, G. Birmpas, A. Filos-Ratsikas, A. Hollender, and A. A. Voudouris 29th International Joint Conference on Artificial Intelligence (IJCAI), 2020

#### [C18] Swap stability in Schelling games on graphs

A. Agarwal, E. Elkind, J. Gan, and A. A. Voudouris 34th AAAI Conference on Artificial Intelligence (AAAI), 2020

#### [C17] Peeking behind the ordinal curtain: Improving distortion via cardinal queries

G. Amanatidis, G. Birmpas, A. Filos-Ratsikas, and A. A. Voudouris 34th AAAI Conference on Artificial Intelligence (AAAI), 2020

#### [C16] The distortion of distributed voting

A. Filos-Ratsikas, E. Micha, and A. A. Voudouris

12th International Symposium on Algorithmic Game Theory (SAGT), 2019

#### [C15] Protecting elections by recounting ballots

E. Elkind, J. Gan, S. Obraztsova, Z. Rabinovich, and A. A. Voudouris 28th International Joint Conference on Artificial Intelligence (IJCAI), 2019

#### [C14] Schelling games on graphs

E. Elkind, J. Gan, A. Igarashi, W. Suksompong, and A. A. Voudouris 28th International Joint Conference on Artificial Intelligence (IJCAI), 2019

#### [C13] Almost envy-freeness in group resource allocation

M. Kyropoulou, W. Suksompong, and A. A. Voudouris

28th International Joint Conference on Artificial Intelligence (IJCAI), 2019

#### [C12] Peer-to-peer energy-aware tree network formation

A. Madhja, S. Nikoletseas, D. Tsolovos, and A. A. Voudouris
16th ACM International Symposium on Mobility Management and Wireless Access (MOBIWAC), 2018

# [C11] Mobility-aware, adaptive algorithms for wireless power transfer in ad hoc networks A. Madhja, S. Nikoletseas, and A. A. Voudouris

14th International Symposium on Algorithmics for Wireless Sensor Networks (ALGOSENSORS), 2018

#### [C10] Adaptive wireless power transfer in mobile ad hoc networks

A. Madhja, S. Nikoletseas, and A. A. Voudouris

14th International Conference on Distributed Computing in Sensor Systems (DCOSS), 2018

# [C9] The efficiency of resource allocation mechanisms for budget-constrained users

I. Caragiannis and A. A. Voudouris

19th ACM Conference on Economics and Computation (EC), 2018

#### [C8] Bounding the inefficiency of compromise

I. Caragiannis, P. Kanellopoulos, and A. A. Voudouris 26th International Joint Conference on Artificial Intelligence (IJCAI), 2017

#### [C7] Optimizing positional scoring rules for rank aggregation

I. Caragiannis, X. Chatzigeorgiou, G. A. Krimpas, and A. A. Voudouris 31st AAAI Conference on Artificial Intelligence (AAAI), 2017

#### [C6] How effective can simple ordinal peer grading be?

I. Caragiannis, G. A. Krimpas, and A. A. Voudouris

17th ACM Conference on Economics and Computation (EC), 2016

Invited to a special issue of ACM TEAC with the best papers from EC 2016

#### [C5] co-rank: an online tool for collectively deciding efficient rankings among peers

I. Caragiannis, G. A. Krimpas, M. Panteli, and A. A. Voudouris 30th AAAI Conference on Artificial Intelligence (AAAI), 2016

#### [C4] Near-optimal asymmetric binary matrix partitions

F. Abed, I. Caragiannis, and A. A. Voudouris

40th International Symposium on Mathematical Foundations of Computer Science (MFCS), 2015

# [C3] Efficiency and complexity of price competition among single-product vendors

I. Caragiannis, X. Chatzigeorgiou, P. Kanellopoulos, G. A. Krimpas, N. Protopapas, A. A. Voudouris 24th International Joint Conference on Artificial Intelligence (IJCAI), 2015

# [C2] Aggregating partial rankings with applications to peer grading in massive online open courses

I. Caragiannis, G. A. Krimpas, and A. A. Voudouris

14th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS), 2015

#### [C1] Welfare guarantees for proportional allocations

I. Caragiannis and A. A. Voudouris

7th International Symposium on Algorithmic Game Theory (SAGT), 2014

Invited to a special issue of TOCS with the best papers from SAGT 2014-2015

# Teaching experience

#### School of Computer Science and Electronic Engineering, University of Essex

- Supervisor of the module *CE150: Introduction to Programming with C* (Autumn Term 2020-2024)
- Supervisor of the module *CF961: Introduction to Financial Market Analysis* (Autumn Term 2020-2024)
- Team supervisor for the module *CE101: Team Project Challenge* (Full year 2021-2025)

#### Oriel College, University of Oxford

• Instructor for the course *Introduction to Algorithmic Game Theory* (Summer school organised by CBL-international, July 2019)

#### Department of Computer Science, University of Oxford

• Tutor for the course *Computational Game Theory* (Michaelmas term 2018)

#### Department of Computer Engineering and Informatics, University of Patras

- Teaching Assistant for the course *Computational Complexity* (Spring 2014, 2018)
- Teaching Assistant for the course *Economic Theory and Algorithms* (Fall 2013 2017)
- Teaching Assistant for the course *Symbolic Programming Lab* (Spring 2011 2012)

# Research-oriented student supervision

#### **Georgios Kalantzis** (September 2024 – Today)

- PhD in Computer Science, University of Edinburgh (external)
- Area of research: Distortion in social choice problems
- · Co-supervised with Aris Filos-Ratsikas
- Collaboration led to publication [C43]

#### Rongsen Zhang (October 2020 - May 2024)

- PhD in Computer Science, University of Essex
- Thesis: Mechanism design without money for heterogeneous and distributed facility location problems
- Co-supervised with Panagiotis Kanellopoulos
- Collaboration led to publications [C31], [C35], [C36], [J27], [J35], [J38]

#### Mohammad Lotfi (May 2023 - May 2024)

Remote undergraduate summer project, Sharif University of Technology (external)

• Collaboration led to publications [J34], [C40], [J39]

#### Aishwarya Agarwal (June - September 2019)

- MSc in Mathematics and Foundations of Computer Science, University of Oxford
- Thesis: Schelling segregation: A game-theoretic analysis
- · Co-supervised with Prof Edith Elkind
- Collaboration led to publications [C18], [J19]

# Community service

#### Organizer:

- 2025 Workshop on Fair Resource Allocation: Concepts, Algorithms, and Complexity (in conjunction with ICALP 2025)
- 2023 Workshop on Fair Resource Allocation: Concepts, Algorithms, and Complexity (in conjunction with SAGT 2023)
- 15th International Symposium on Algorithmic Game Theory (SAGT 2022; at University of Essex)
- 2021 Workshop on Fair Resource Allocation: Concepts, Algorithms, and Complexity (in conjunction with EC 2021)
- Workshop on the Distortion and Information-Efficiency Trafeoffs (in conjunction with EC 2020)
- Workshop on Theoretical Aspects of Fairness (in conjunction with ICALP 2019)

#### **Editorial Board member:**

- Information Processing Letters (July 2024 today)
- Theoretical Computer Science (January 2025 today)

#### **Editor:**

- Special Issue on Economics and Computations (Information Processing Letters)
- Special Issue of SAGT 2022 (Theoretical Computer Science)

#### PC Chair:

• 15th International Symposium on Algorithmic Game Theory (SAGT), 2022

#### **SPC** member:

- AAAI 2026 (AI Alignment Track)
- AAMAS 2025
- WINE 2024

#### PC member:

- AAAI (2020, 2021, 2022, 2024, 2025, 2026)
- AAMAS (2020, 2023, 2024)
- ACM EC (2020, 2021, 2023, 2025)

- ECAI 2020
- GAIW (2020, 2022)
- ICML 2021
- IEEE CIFEr 2022
- IJCAI (2018\*, 2019, 2020, 2023, 2024)
- IJCAI Survey Track 2022
- · NeurIPS 2020
- SAGT 2025
- WINE 2022

#### Reviewer (journals):

- ACM Transactions on Economics and Computation (TEAC)
- Algorithmica
- Artificial Intelligence (ARTINT)
- Discrete Applied Mathematics (DAM)
- Games and Economic Behavior (GEB)
- INFORMS Journal on Computing (IJOC)
- Information Processing Letters (IPL)
- Journal of Artificial Intelligence Research (JAIR)
- Journal of Autonomous Agents and Multi-Agent Systems (JAAMAS)
- Journal of the ACM (JACM)
- Mathematics of Operations Research (MOR)
- Management Science (MNSC)
- PNAS Nexus
- Social Choice and Welfare (SCWE)
- Theoretical Computer Science (TCS)

**Reviewer (conferences):** ACM EC 2017, ADT 2021, AAMAS 2015, COMSOC 2018, ESA (2019, 2025), ICALP (2015, 2019), IJCAI 2017, ISAAC (2018, 2021), MFCS 2020, SODA (2017, 2022, 2024), SAGT (2017, 2019, 2020, 2021), SIROCCO 2019, STOC 2025, TAMC 2020, WINE (2015, 2018, 2019, 2020, 2021)

#### Reviewer (grant proposals):

- Engineering and Physical Sciences Research Council (UK); Member of the EPSRC Peer Review College
- French National Research Agency (ANR)
- Narodowe Centrum Nauki (Poland)

#### PhD viva examinations:

<sup>\*</sup>Recognised as a distinguished PC member.

- Tianze Wei (City University of Hong Kong, 2025; Supervisor: Minming Li)
- Xinpeng Long (University of Essex, 2024; Supervisor: Michael Kampouridis)
- Ji Qi (King's College London, 2022; Supervisor: Carmine Ventre)

# Talks and presentations

#### (invited) 2025 Archimedes Workshop on Algorithmic Game Theory

- Title: *Utilitarian distortion with predictions*
- July 2025

#### (invited) Algorithms seminar, Southern Denmark University

- Title: Information-distortion tradeoffs in social choice
- July 2025

#### (conference) 17th International Symposium on Algorithmic Game Theory (SAGT)

- Title: Agent-constrained truthful facility location games
- · September 2024

#### (invited) Departmental research seminar, Vrije Universiteit Amsterdam

- Title: Information-distortion tradeoffs in social choice and matching
- · May 2023

#### (invited) Computational Complexity and Game Theory Group Seminar, University of Aarhus

- Title: The distortion of distributed voting
- February 2023

#### (invited) COMSOC Video Seminar

- Title: The metric distortion of multiwinner voting
- October 2022

#### (invited) UK Economics and Computation seminar

- Title: Information-distortion tradeoffs in social choice and matching
- March 2022

#### (conference) 36th AAAI Conference on Artificial Intelligence (AAAI)

- Title: The metric distortion of multiwinner voting
- February 2022

#### (conference) 36th AAAI Conference on Artificial Intelligence (AAAI)

- Title: Heterogeneous facility location with limited resources
- February 2022

#### (conference) 14th International Symposium on Algorithmic Game Theory (SAGT)

- Title: Approximate mechanism design for distributed facility location
- September 2021

## (conference) 30th International Joint Conference on Artificial Intelligence (IJCAI)

- Title: Distortion in social choice problems: The first 15 years and beyond
- August 2021

#### (conference) 13th International Symposium on Algorithmic Game Theory (SAGT)

- Title: Modified Schelling games
- September 2020

#### (invited) Workshop on the Distortion and Information-Efficiency Tradeoffs (DIET)

- Title: The distortion of distributed voting and facility location
- July 2020

#### (invited) Economics and Computation Seminar, University of Liverpool

- Title: Modified Schelling games
- September 2020

#### (invited) AI for Decision Making seminar, University of Essex

- Title: Peeking behind the ordinal curtain: Improving distortion via cardinal queries
- February 2020

#### (invited) Algorithmic game theory at Oxford: A mini-workshop, University of Oxford

- Title: Peeking behind the ordinal curtain: Improving distortion via cardinal queries
- · September 2019

#### (conference) 28th International Joint Conference on Artificial Intelligence (IJCAI)

- · Title: Schelling games on graphs
- August 2019

#### (poster and lightning talk) Twenty Years of the Price of Anarchy Workshop (20PoA)

- Title: The efficiency of resource allocation mechanisms for budget-constrained users
- July 2019

#### (poster and lightning talk) 14th Conference on Web and Internet Economics (WINE)

- Title: Truthful mechanisms for ownership transfer with expert advice
- · December 2018

#### (conference) 19th ACM Conference on Economics and Computation (EC)

- Title: The efficiency of resource allocation mechanisms for budget-constrained users
- June 2018

#### (workshop) Workshop on Opinion Aggregation, Dynamics, and Elicitation

- Title: Truthful mechanisms for ownership transfer with expert advice
- June 2018

#### (workshop) 12th Athens Colloquium on Algorithms and Complexity (ACAC)

- Title: The efficiency of resource allocation mechanisms for budget-constrained users
- August 2017

#### (conference) 31st AAAI Conference on Artificial Intelligence (AAAI)

- Title: Optimizing positional scoring rules for rank aggregation
- February 2017

#### (workshop) 11th Athens Colloquium on Algorithms and Complexity (ACAC)

- Title: How effective can simple ordinal peer grading be?
- August 2016

#### (conference) 17th ACM Conference on Economics and Computation (EC)

- Title: How effective can simple ordinal peer grading be?
- July 2016

#### (demo and poster) 30th AAAI Conference on Artificial Intelligence (AAAI)

- Title: co-rank: an online tool for collectively deciding efficient rankings among peers
- July 2016

#### (conference) 40th International Symposium on Mathematical Foundations of Computer Science (MFCS)

- Title: Near-optimal asymmetric binary matrix partitions
- August 2015

#### (invited) First Algorithmic Game Theory Athens Workshop (AGaThA)

- Title: Near-optimal asymmetric binary matrix partitions
- May 2015

#### (workshop) 10th Athens Colloquium on Algorithms and Complexity (ACAC)

- Title: Aggregating partial rankings with applications to peer grading in MOOCs
- August 2015

#### (conference) 7th International Symposium on Algorithmic Game Theory (SAGT)

- Title: Welfare guarantees for proportional allocations
- October 2014

#### (workshop) 9th Athens Colloquium on Algorithms and Complexity (ACAC)

- Title: Welfare guarantees for proportional allocations
- August 2014