
ABOUT ME

- I am a postdoctoral fellow working with Milind Tambe at Harvard to build AI systems with positive social impact!

RESEARCH EXPERTISE

- Multi-agent Systems (Coordination & Cooperation), Reinforcement Learning, Game Theory

EDUCATION

| | | |
|----------------------------------|--|----------------------------|
| Ph.D. in Computer Science | École Polytechnique Fédérale de Lausanne (EPFL) | 2016 Sep – 2022 Jan |
|----------------------------------|--|----------------------------|

- Artificial Intelligence Laboratory, School of Computer and Communication Sciences, GPA 6.0/6.0
- Thesis: ‘Scalable Multi-agent Coordination and Resource Sharing’
- Advisor: Professor Boi Faltings

| | | |
|-------------------------------|---|--------------------|
| Diploma of Engineering | National Technical University of Athens (NTUA) | 2009 – 2015 |
|-------------------------------|---|--------------------|

- School of Electrical and Computer Engineering
- 5-year Diploma (Master Equivalent). Order of admission: 4th/450. Overall GPA 8.14/10, in-major GPA 9.0/10
- Thesis: ‘A Novel 3-D FPGA Placement Algorithm based on Ant Colony Optimization’
- Advisor: Associate Professor Dimitrios Soudris

RESEARCH EXPERIENCE

| | | |
|---------------------------|---|---------------------------|
| PostDoc Researcher | Teamcore, Harvard John A. Paulson School Of Engineering And Applied Sciences | 2022 Sep – Present |
|---------------------------|---|---------------------------|

- AI for Social Good, Multi-agent systems, Learning & Optimization

| | | |
|---------------------------|---|----------------------------|
| PostDoc Researcher | Artificial Intelligence Laboratory, EPFL | 2022 Jan – 2022 Aug |
|---------------------------|---|----------------------------|

- Multi-agent deep reinforcement learning

| | | |
|-------------------------|---|----------------------------|
| Ph.D. Researcher | Artificial Intelligence Laboratory, EPFL | 2016 Sep – 2022 Jan |
|-------------------------|---|----------------------------|

- Large-scale multi-agent systems (cooperation & coordination), reinforcement learning, and game theory

| | | |
|---------------------------|---|----------------------------|
| Research Associate | Microprocessors and Digital Systems Laboratory, NTUA | 2015 Sep – 2016 Jul |
|---------------------------|---|----------------------------|

- ‘AEGLE: An analytics framework for integrated and personalized healthcare services in Europe’ (H2020)
- Application of machine learning techniques in embedded systems

| | | |
|--|---|----------------------------|
| Undergraduate Research Member | Microprocessors and Digital Systems Laboratory, NTUA | 2014 Nov – 2015 Jun |
|--|---|----------------------------|

- 3-D Reconfigurable Architectures (3-D FPGAs), and Swarm Intelligence Algorithms

TEACHING EXPERIENCE

Guest Lecturer

- **Intelligent Agents** (Fall 2017, 2019), School of Computer & Communication Sciences, EPFL

Teaching Assistant

- **Intelligent Agents** (Fall 2017, 2018, 2019, 2020, 2021), School of Computer & Communication Sciences, EPFL
- **Intelligence Artificielle** (Spring 2017, 2018, 2020), School of Computer & Communication Sciences, EPFL
- **Microprocessors Laboratory** (Fall 2015), School of Electrical & Computer Engineering, NTUA

Student Supervision

- Supervised 3 Summer Interns, 2 Master Theses, 4 Master Semester Projects, 1 Bachelor Thesis, and 3 Bachelor Semester Projects

AWARDS & FELLOWSHIPS

- Teaching Assistant Award, 2019, School of Computer & Communication Sciences, EPFL
- Scholarship from the Greek State Scholarships Foundation (IKY)
- Award from the Greek Minister of Education and Lifelong Learning Ms Anna Diamantopoulou

PROGRAM COMMITTEES

- The Workshop on Artificial Intelligence for Social Good (AI4SG at AAI) 2023
- AAI Conference on Artificial Intelligence (AAI) 2023
- International Conference on Autonomous Agents and Multiagent Systems (AAMAS) 2022 (subreviewer)
- The Web Conference (formerly known as WWW) 2021 (subreviewer)
- International Joint Conference on Artificial Intelligence (IJCAI) 2020, 2023 (subreviewer)

WORKSHOP ORGANIZATION

- The 4th International Workshop on Autonomous Agents for Social Good (AASG) 2023, in conjunction with the 22nd International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2023).

ACADEMIC VISITS

- Apr 1 - Apr 5, 2019, Singapore Management University, Host: Associate Professor Akshat Kumar

JOURNAL PAPERS

- 2022, **P. Danassis**, M. Sakota, A. Filos-Ratsikas, B. Faltings, ‘Putting Ridesharing to the Test: Efficient and Scalable Solutions and the Power of Dynamic Vehicle Relocation’, *Artificial Intelligence Review*
- 2022, **P. Danassis**, Z. D. Erden, B. Faltings, ‘Exploiting Environmental Signals to Enable Policy Correlation in Large-scale Decentralized Systems’, *Journal of Autonomous Agents and Multi-agent Systems*

CONFERENCE PAPERS

- 2023, **P. Danassis**, S. Verma, J. Killian, A. Taneja, M. Tambe, ‘Limited Resource Allocation in a Non-Markovian World: The Case of Maternal and Child Healthcare’, *IJCAI 2023: Proceedings of the 32nd International Joint Conference on Artificial Intelligence*
- 2023, **P. Danassis**, A. Filos-Ratsikas, H. Chen, M. Tambe, B. Faltings, ‘AI-driven Prices for Externalities and Sustainability in Production Markets’, *AAMAS 2023: Proceedings of the 22nd International Conference on Autonomous Agents and MultiAgent Systems*
- 2022, **P. Danassis**, A. Triastcyn, B. Faltings, ‘A Distributed Differentially Private Algorithm for Resource Allocation in Unboundedly Large Settings’, *AAMAS 2022: Proceedings of the 21st International Conference on Autonomous Agents and MultiAgent Systems*
- 2021, **P. Danassis**, F. Wiedemair, B. Faltings, ‘Improving Multi-agent Coordination by Learning to Estimate Contention’, *IJCAI 2021: Proceedings of the 30th International Joint Conference on Artificial Intelligence*
- 2021, **P. Danassis**, Z. D. Erden, B. Faltings, ‘Improved Cooperation by Exploiting a Common Signal’, *AAMAS 2021: Proceedings of the 20th International Conference on Autonomous Agents and MultiAgent Systems*
- 2020, **P. Danassis**, B. Faltings, ‘Efficient Allocations in Constant Time: Towards Scalable Solutions in the Era of Large Scale Intelligent Systems’, *ECAI 2020: Proceedings of the 24th European Conference on Artificial Intelligence*, 2-page Highlight Paper
- 2019, **P. Danassis**, A. Filos-Ratsikas, B. Faltings, ‘Anytime Heuristic for Weighted Matching Through Altruism-Inspired Behavior’, *IJCAI 2019: Proceedings of the 28th International Joint Conference on Artificial Intelligence*
- 2019, **P. Danassis**, B. Faltings, ‘Courtesy as a Means to Coordinate’, *AAMAS 2019: Proceedings of the 18th International Conference on Autonomous Agents and MultiAgent Systems*

PEER-REVIEWED WORKSHOPS AND SYMPOSIA

- 2023, **P. Danassis**, A. Filos-Ratsikas, H. Chen, M. Tambe, B. Faltings, ‘AI-driven Prices for Externalities and Sustainability in Production Markets’, *AASG 2023: 4th International Workshop on Autonomous Agents for Social Good*
- 2022, Lj. Rokvic, **P. Danassis**, B. Faltings, ‘Privacy-preserving Data Filtering in Federated Learning Using Influence Approximation’, *FL-NeurIPS’22: International Workshop on Federated Learning: Recent Advances and New Challenges at NeurIPS 2022*
- 2022, Lj. Rokvic, **P. Danassis**, B. Faltings, ‘Privacy-preserving Data Filtering in Federated Learning Using Influence Approximation’: *FL-IJCAI’22: International Workshop on Trustworthy Federated Learning at IJCAI 2022*
- 2021, **P. Danassis**, A. Triastcyn, B. Faltings, ‘Differential Privacy Meets Maximum-weight Matching’, *ALA 2021: Adaptive Learning Agents Workshop at AAMAS*
- 2021, **P. Danassis**, A. Triastcyn, B. Faltings, ‘Differential Privacy Meets Maximum-weight Matching’, *AASG 2021: Autonomous Agents for Social Good Workshop at AAMAS*
- 2021, **P. Danassis**, Z. D. Erden, B. Faltings, ‘Improved Cooperation by Exploiting a Common Signal’, *AASG 2021: Autonomous Agents for Social Good Workshop at AAMAS*
- 2021, **P. Danassis**, A. Triastcyn, B. Faltings, ‘Differential Privacy Meets Maximum-weight Matching’, *PPAI 2021: Privacy-Preserving Artificial Intelligence at AAAI*
- 2020, **P. Danassis**, B. Faltings, ‘Learning to Persist or Switch: Efficient and Fair Allocations in Large-scale Multi-agent Systems’, *ALA 2020: Adaptive Learning Agents Workshop at AAMAS*
- 2019, **P. Danassis**, A. Filos-Ratsikas, B. Faltings, ‘Anytime Heuristic for Weighted Matching Through Altruism-Inspired Behavior’, *ALA 2019: Adaptive Learning Agents Workshop at AAMAS*
- 2018, **P. Danassis**, B. Faltings, ‘Courtesy as a Means to Anti-coordinate’, *ALA 2018: Adaptive Learning Agents Workshop at AAMAS*

- 2018, **P. Danassis**, B. Faltings, ‘Learning in Ad-hoc Anti-coordination Scenarios’, AAAI Spring Symposium Series

PUBLICATIONS PRIOR TO MY DOCTORAL STUDIES

- 2017, **P. Danassis**, K. Siozios, C. Korkas, D. Soudris, E. Kosmatopoulos, ‘A Low-Complexity Control Mechanism Targeting Smart Thermostats’, Energy and Buildings, Elsevier
- 2017, K. Siozios, **P. Danassis**, N. Zompakis, C. Korkas, E. Kosmatopoulos and D. Soudris, ‘Supporting Decision Making for Large-Scale IoTs: Trading Accuracy for Computational Complexity’, Components and Services for IoT Platforms: Paving the Way for IoT Standards, Springer (invited book chapter)
- 2016, **P. Danassis**, K. Siozios, D. Soudris, ‘ANT3D: Simultaneous Partitioning and Placement for 3-D FPGAs based on Ant Colony Optimization’, IEEE Embedded Systems Letters, IEEE
- 2016, **P. Danassis**, K. Siozios, D. Soudris, ‘Parallel Application Placement onto 3-D Reconfigurable Architectures’, International Conference on Modern Circuits and Systems Technologies (MOCASST), IEEE sponsored