

---

## 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

---

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

- 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

<b>Diploma of Engineering</b>	<b>National Technical University of Athens (NTUA)</b>	<b>2009 – 2015</b>
-------------------------------	---	--------------------

- School of Electrical and Computer Engineering
- 5-year Diploma (Master Equivalent). Order of admission: 4<sup>th</sup>/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

---

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

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

<b>PostDoc Researcher</b>	<b>Artificial Intelligence Laboratory, EPFL</b>	<b>2022 Jan – 2022 Aug</b>
---------------------------	---	----------------------------

- Multi-agent deep reinforcement learning

<b>Ph.D. Researcher</b>	<b>Artificial Intelligence Laboratory, EPFL</b>	<b>2016 Sep – 2022 Jan</b>
-------------------------	---	----------------------------

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

<b>Research Associate</b>	<b>Microprocessors and Digital Systems Laboratory, NTUA</b>	<b>2015 Sep – 2016 Jul</b>
---------------------------	---	----------------------------

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

<b>Undergraduate Research Member</b>	<b>Microprocessors and Digital Systems Laboratory, NTUA</b>	<b>2014 Nov – 2015 Jun</b>
--	---	----------------------------

- 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), 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, 3 Master Semester Projects, 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

## 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

## WORKING PAPERS

---

- Lj. Rokvic, **P. Danassis**, B. Faltings, ‘A Practical Influence Approximation for Privacy-Preserving Data Filtering in Federated Learning’

## 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**, 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

---

- 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