

Konstantinos Emmanouilidis

[Website](#) | [Email](#) | [Linkedin](#) | [GitHub](#)

RESEARCH INTERESTS

Theoretical Foundations of AI, (Multi-agent) Optimization, Game Theory, Theoretical Computer Science

EDUCATION

- Johns Hopkins University (JHU)** 08/2022 - current
PhD Candidate, Department of Computer Science
◦ Advisors: Nicolas Loizou, Rene Vidal (UPenn)
- Johns Hopkins University (JHU)** 08/2022 - 05/2024
Master in Computer Science
- Democritus University Of Thrace (DUTH)** 10/2016 - 07/2021
BSc & MSc in Electrical and Computer Engineering
◦ Grade: 9.51 / 10.00 (top 0.001% in university's history)
◦ Advisor: Pavlos Efrimidis

HONORS & AWARDS

- **JHU Mathematical Institute for Data Science, Fellowship (2x)** 2023, 2024
- **IEEEExtreme 14.0 Programming Competition, top 10% worldwide** 10/2020
- **International Mathematical Competition (IMC), Bronze Medal** 07/2019
- **South Eastern European Mathematical Olympiad, Bronze Medal** 03/2019
- **IEEE Region 8 Acceleration Entrepreneurship Program, 1st place** 12/2018
- **South Eastern European Mathematical Olympiad (SEEMOUS), Bronze Medal** 03/2018
- **NASA Space Apps Larisa, 3rd place** 03/2017
- **Regional Chess Competition, 1st place** 06/2014

EXPERIENCE

- University of Pennsylvania (UPenn)** 08/2024 - current
◦ *Research Associate in GRASP Lab, Rene Vidal's Lab*
◦ *Working on Robustness of Deep Networks in Semantic Attacks*
- Johns Hopkins University (JHU)** 08/2022 - 07/2024
◦ *Research Assistant in Optimization & ML Lab (Advisor: Nicolas Loizou)*
◦ *Conducted research on large-scale Optimization methods for Multi-agent problems*
- National Technical University of Athens, CoReLab** 08/2020 - 07/2021
◦ *Conducted research on opinion dynamics and characterised their convergence in graphs*

PUBLICATIONS

1. Stochastic Extragradient with Random Reshuffling: Improved Convergence for Variational Inequalities,
In the 27th International Conference on Artificial Intelligence and Statistics (AISTATS 2024),
Konstantinos Emmanouilidis, Rene Vidal, Nicolas Loizou
2. *Opinion Dynamics in Graphs with Hidden Links,*
Undergraduate thesis, w/ Dimitris Fotakis, Pavlos Efrimidis

TECHNICAL SKILLS

- *Python, C++ (intermediate)*
- *Web: HTML, CSS, JavaScript, php (advanced)*
- *Frameworks: PyTorch, Numpy, TensorFlow*

TEACHING EXPERIENCE

- JHU, Optimization for Data Science, *Prof. Nicolas Loizou* 08/2023 - 12/2023
- DUTH, Algorithms and Data Structures, *Prof. Pavlos Efraimidis* 10/2020 - 02/2021

PROFESSIONAL SERVICE

- Reviewer: *ICML 2024, ICLR 2024, JMLR 2024*
- Organiser: *Workshop on Machine Learning and Optimization, IEEE CISS 2023*
- Extracurricular & Volunteering:
 - ❖ *Volunteer, DeepMath Conference* 2024
 - ❖ *Chairman, IEEE DUTH Student Branch* 06/2019 - 08/2020
 - ❖ *Founder of IEEE DUTH Computer Chapter* 12/2019
 - ❖ *Vice Chair for Technical Activities, IEEE DUTH Student Branch* 11/2018 - 05/2019

MISCELLANEOUS

- Languages: English, German, French, Greek
- Interests: Piano, Guitar