# Konstantinos Emmanouilidis

*Website*
*Email*
*Linkedin*

## RESEARCH INTERESTS

*Foundations of AI and machine learning, (Multi-agent) Optimization, Game Theory, Theoretical Computer Science*

## EDUCATION

- **Johns Hopkins University (JHU)**  *05/2024 - 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 Efraimidis

## HONORS & AWARDS

- **JHU Mathematical Institute for Data Science,** Spring 2024 Fellowship  *01/2024*
- **JHU Mathematical Institute for Data Science,** Summer 2023 Fellowship  *02/2023*
- **IEEExtreme 14.0 Programming Competition**, top 10% worldwide  *10/2020*
- **International Mathematical Competition (IMC),** Bronze Medal  *07/2019*
- **South Eastern European Mathematical Olympiad (SEEMOUS),** 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*

## EXPERIENCE

**GRASP Lab, University of Pennsylvania (UPenn)**  *08/2024 - current*
- *Visiting Student in Rene Vidal's Lab*
- *Working on Robustness of Deep Networks through LLM's and Semantic Information*

**Optimization - ML Lab, Johns Hopkins University (JHU)**  *08/2020 - 07/2021*
- *Research Assistant in Professor Nicolas Loizou' Lab*
- *Worked on Large Scale Optimization Methods for Multi-agent problems*

**CoReLab, National Technical University of Athens (NTUA)**  *08/2020 - 07/2021*
- *Advisor: Dimitris Fotakis*
- *Worked on opinion dynamics and characterised their convergence in graphs*

## PUBLICATIONS & RESEARCH PROJECTS

- Stochastic Extragradient with Random Reshuffling: Improved Convergence for Variational Inequalities
  Konstantinos Emmanouilidis, Rene Vidal, Nicolas Loizou , AISTATS 2024

- *Opinion Dynamics in Graphs with Hidden Links,*
  *Undergraduate thesis, w/ Dimitris Fotakis, Pavlos Efraimidis*

## TECHNICAL SKILLS

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

## TEACHING EXPERIENCE

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

## PROFESSIONAL SERVICE

- *Reviewer: ICML 2024, ICLR 2024, JMLR 2024*
- *Organiser: Workshop on Federated Learning, NeurIPS*
- *Volunteering:*
  - *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*
  - *Coordinator of "Learning to Code with Python" team, IEEE DUTH SB*          *10/2017 - 05/2018*

## MISCELLANEOUS

- *Languages: English, Greek, German, French*
- *Interests/Hobbies: Piano, Guitar*