DIMITRIS OIKONOMOU

Charles Village, 21218, Baltimore, MD, USA | doikono1@jh.edu | +1 667 359 9932 | https://dimitris-oik.github.io/

EDUCATION

Johns Hopkins University

Baltimore, USA

PhD in Computer Science

08/2023 - Present

· Advisor: Dr. Nicolas Loizou

National Technical University of Athens

Athens, Greece

MSc in Data Science and Machine Learning

GPA: 9.8/10

• Thesis: Efficient Learning Algorithms of Time Varying Ranking Distributions, Advisor: Dr. Dimitris Fotakis

University of Göttingen

Göttingen, Germany

MSc in Mathematics

GPA: 1.2/1 (∼ 9.7/10)

Thesis: Convergence Results for Entropic Transfer Operators, Advisor: Dr. Bernhard Schmitzer

National and Kapodistrian University of Athens

Athens, Greece

BSc in Mathematics

GPA: 9.6/10

RESEARCH

- [1] **Dimitris Oikonomou** and Nicolas Loizou. *Stochastic Polyak Step-sizes and Momentum: Convergence Guarantees and Practical Performance*. In ICLR 2025
- [2] **Dimitris Oikonomou** and Nicolas Loizou. *Sharpness-Aware Minimization: General Analysis and Improved Rates*. In ICLR 2025
- [3] Robert Gower, Guillaume Garrigos, Nicolas Loizou, **Dimitris Oikonomou**, Konstantin Mishchenko, and Fabian Schaipp. *Analysis of an Idealized Stochastic Polyak Method and its Application to Black-Box Model Distillation*. arXiv preprint arXiv:2504.01898, 2025
- [4] **Dimitris Oikonomou** and Nicolas Loizou. *Safeguarded Stochastic Polyak Step-Sizes for Non-smooth Optimization: Robust Performance Without Small (Sub)Gradients*. Under Submission.

Honors & Awards

Mathematical Olympiads

• International Mathematical Olympiad (IMO): Bronze Medal

Santa Marta, Colombia, 2013

• Greek Mathematical Olympiad: Silver Medal

Athens, Greece, 2014 Athens, Greece, 2013

• Greek Mathematical Olympiad: Bronze Medal

Scholarships

· Hellenic Post Scholarship

2015-2019

DAAD Scholarship

2019-2020

JHU MINDS Fellowship

2024, 2025

TECHNICAL SKILLS

Programming Languages: Python, R, C/C++, MATLAB

Libraries: PyTorch, NumPy, scikit-learn, Pandas

Applications: OpenMP, CUDA, LATEX

TEACHING & PROFESSIONAL SERVICE

Teaching Assistant: Computer Vision

JHU, Fall 2024

Reviewer: IEEE Transactions on Signal Processing, ICML, NeurIPS, ICLR

LANGUAGES

English (Fluent), Greek (Native), French (Basic)