

EDUCATION

Ph.D. in Machine Learning

Nov. 2024 – Present

National and Kapodistrian University of Athens, Department of Informatics and Telecommunications

- Supervisor: Christos Tzamos.
- Research interests: Transformers, Neural Networks, Optimization, Combinatorics.
- Published at: **NeurIPS** (1), **ICLR** (1, under review).

M.Sc. in Statistical Science

Oct. 2020 – Sep. 2021

University of Oxford, Department of Statistics, Lincoln College

- Thesis: *Authorship Attribution in Ancient Greek Texts*, co-supervised by Yannis Assael, George Deligiannidis, and Thea Sommerschild – Grade: 61%.
- Grade: **Merit**.

B.Sc. in Mathematics

Sep. 2016 – Aug. 2020

University of Patras, Department of Mathematics

- Thesis: *Mathematical Techniques in Data Science and Machine Learning*, under the supervision of Michael N. Vrahatis – Grade: **10.00/10.00**.
- Grade: **8.90/10.00** (Distinction), equivalent to first-class honours (**top 1%**).

EXPERIENCE

Ph.D. Researcher

Jul. 2024 – Present

Archimedes, Athena Research Center

- Conducting research on theory-based Machine Learning models through Optimization and Statistics,
- Supervisor: Christos Tzamos.

Research Assistant

Apr. 2024 – Jun. 2024

Technical University of Denmark, Department of Applied Mathematics and Computer Science

- Explored Deep Learning theory via Riemannian geometry.
- Supervisor: Georgios Arvanitidis.

Research Assistant

Apr. 2023 – Dec. 2023

Czech Technical University in Prague, Faculty of Electrical Engineering

- Focused on the Mini-batch Stochastic Subgradient Projection method.
- Supervisors: Vyacheslav Kungurtsev, and Jakub Mareček.

Research Assistant

Apr. 2022 – Apr. 2024

Athena Research Center, Department of Institute for the Management of Information Systems

- Researched the interface of NLP, Privacy, and Security tasks using LLMs.
- Supervisor: Constantinos Patsakis.

Research Assistant

Oct. 2021 – Mar. 2022

Max Planck Institute for Mathematics in the Sciences

- Worked on the authorship attribution task with a focus on Plutarch's texts using LLMs.
- Supervisors: Ivan P. Yamshchikov, and Jürgen Jost.

PUBLICATIONS

C: Conference J: Journal †: equal contribution.

C_3 *A Derandomization Framework for Structure Discovery: Applications in Neural Networks and Beyond*. Nikos Tsikouras, Yorgos Pantis, Ioannis Mitliagkas, Christos Tzamos. **ICLR 2026**. [Under Review]

C_2^\dagger *Teaching Transformers to Solve Combinatorial Problems through Efficient Trial & Error*. Panagiotis Gian-

- noulis, Yorgos Pantis, Christos Tzamos. **NeurIPS 2025**. [Paper]
- J_1 *The Anatomy of Deception: Measuring Technical and Human Factors of a Large-scale Phishing Campaign*. Anargyros Chrysanthou, Yorgos Pantis, Constantinos Patsakis. **Computers & Security, 2024**. [Paper]
- C_1 *BERT in Plutarch's Shadows*. Ivan P. Yamshchikov, Alexey Tikhonov, Yorgos Pantis, Charlotte Schubert and Jürgen Jost. **EMNLP 2022**. [Paper]

HONORS & AWARDS

4-year Full Scholarship

Jul. 2024 – Present

Archimedes, Athena Research Center

In support of my doctoral studies due to my background.

Research Infrastructure Grant

Dec. 2024 – Present

GRNET – Greek Research & Technology Network

In support of my doctoral research, computational resources were provided, including AWS credits and high performance computing systems.

Full Annual Scholarship

Oct. 2020 – Aug. 2021

Bodossaki Foundation

In support of my master's studies due to my bachelor performance.

Covid-19 Assistance Fund

Jun. 2021

University of Oxford, Lincoln College

In support of my master's studies.

Vivian Green Student Assistance Scholarship

Feb. 2021

University of Oxford, Lincoln College

In support of my master's studies.

4-year Annual Scholarship

Sep. 2016 – Sep. 2020

Greek State Scholarships Foundation

In support of my bachelor studies due to my academic performance.

4-year Consistently in the Top 1%

Sep. 2016 – Sep. 2020

University of Patras, Department of Mathematics

Classified in the top-tier of my class for the duration of my bachelor studies.

Ranked Second Among Admitted Students

Sep. 2016

University of Patras, Department of Mathematics

Second place among accepted candidates for the bachelor's degree program.

TALKS & SERVICE

Talks

- HSBC – on Transformers reasoning. Sep. 2025
- Archimedes, Athena Research Center – on Transformers reasoning. May 2025

Reviewer

- NeurIPS 2025, ICLR 2026/2025, ICML 2025, TMLR 2025.

Teaching Assistant

National and Kapodistrian University of Athens, Department of Informatics and Telecommunications

- Computational Learning Theory. Fall Sem. 2025
- Artificial Intelligence II (Deep Learning for NLP). Fall Sem. 2025

Volunteer

- Archimedes, Athena Research Center Sep. 2025 – Present
- Organized Greece's AI competition; trained students for the International AI Olympiad.