Yorgos Pantis

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).

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 Sommerschield – 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, 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**. Paper

$C_2^\dagger$ *Teaching Transformers to Solve Combinatorial Problems through Efficient Trial & Error.* Panagiotis Giannoulis, 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
- Institute of Education Policy – Contributor to the Greek National AI Competition *Jan. 2026*
- HSBC – on Transformer reasoning. *Sep. 2025*
- Archimedes, Athena Research Center – on Transformer reasoning. *May 2025*

Reviewer
- NeurIPS, ICLR, ICML, TMLR.

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.

Skills

- **Programming:** Python, PyTorch, C++.
- **Machine Learning:** Neural Networks, Transformers, Natural Language Processing.
- **Foundations:** Statistics, Mathematics.