

Nikolaos Kougioulis



Nationality: Greek

Location: Thessaloniki, Greece

Education

Sep 2022 – Nov 2025 **MSc in Computer Science & Engineering**, Department of Computer Science, University of Crete, Greece.
Thesis: *Large Causal Models for Temporal Causal Discovery*
Advisor: Prof. Ioannis Tsamardinos
GPA: 9.50/10.00

Nov 2021 **Ptychion (BSc) in Mathematics**, Department of Mathematics, Aristotle University of Thessaloniki, Greece.
Areas: ▪ Pure Mathematics ▪ Applied Mathematics

Military Service

Military obligations fulfilled.

Professional Experience

Oct 2023 – today **Research Engineer**, Foundation for Research & Technology Hellas, Heraklion, Greece.
Conducting research under public (HFRI) and private funding (Huawei Ireland Research Centre). Core contributor in a ~300K Huawei-funded industrial project. Developed SOTA algorithms for causal discovery, root cause analysis and counterfactual reasoning. Implemented and tested proprietary software, successfully applied in real-world scenarios. Exceeded project milestones and acceptance criteria. Collaborated with international teams, delivered biweekly reports and presentations.
Research Areas: ▪ causality ▪ causal discovery ▪ machine learning ▪ deep learning
Skills: ▪ Python ▪ PyTorch ▪ Pandas, NumPy, Scikit-learn ▪ R&D ▪ git ▪ Software engineering ▪ Algorithm design ▪ Technical writing ▪ Scripting

Aug – Oct 2017 **Data Analyst Intern**, Psychological Technologies Ltd, London, United Kingdom.
Successfully extracted, analyzed and presented key wellbeing indicators from real data, collected using the Experience Sampling Method (ESM) via a proprietary mobile app.
Skills: ▪ Data analysis ▪ Data storytelling ▪ R

Publications & Manuscripts

- arXiv preprint **Temporal Causal-based Simulation for Realistic Time-series Generation**
2025 Nikolaos Gkorgkolis, Nikolaos Kougioulis*, MingXue Wang, Bora Caglayan, Andrea Tonon, Dario Simionato & Ioannis Tsamardinos (arXiv 2506.02084).
- MSc **Large Causal Models for Temporal Causal Discovery**
Dissertation Nikolaos Kougioulis.

* Authors contributed equally to this work.

Teaching Assistantships

Fall 2022 **CS-100 Introduction to Computer Science**, *University of Crete*, Greece.

Assist. Prof. Polyvios Pratikakis

First year undergraduate course, Department of Computer Science

Spring **CS-119 Linear Algebra**, *University of Crete*, Greece.

2023,24,25 Prof. Ioannis Tsamardinos

First year undergraduate course, Department of Computer Science

Fall 2023,24 **CS-487 Introduction to Artificial Intelligence**, *University of Crete*, Greece.

Prof. Ioannis Tsamardinos

Final year undergraduate Course, Department of Computer Science

Awards & Distinctions

Jul 2019 **3rd Place Overall in Formula Student ATA 2019**.

Part of the arist.u.r.t.le team, represented Aristotle University of Thessaloniki in international competitions.

Skills

Languages ▪ English (Proficient) ▪ French (Upper Intermediate) ▪ Greek (Native)

Prog. Python, JavaScript, C, MySQL, L^AT_EX

Other git, vim, Linux, Powerpoint

Last Updated: November 26, 2025