

Konstantinos Papaioannou

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<https://kon-pap.github.io>

INTERESTS Systems for Machine Learning, Efficient Training and Inference of Large Machine Learning Models, Cloud Computing

EDUCATION **PhD in Computer Science** *October 2022 - present*
IMDEA Software Institute | Madrid, Spain

Advisor: Thaleia Dimitra Doudali
Thesis focus: Optimization of inference systems for large machine learning models.

MEng Electrical and Computer Engineering (5-year) *Sept 2017 - Jul 2022*
National Technical University of Athens (NTUA) | Athens, Greece

GPA: 8.65/10.00
Thesis: Optimizing ML Workflows by Integrating a Feature Store into Kubeflow
Advisor: Nectarios Koziris

EXPERIENCE **Thesis Intern** *Oct 2021 - Sept 2022*
Arrikto | Athens, Greece

Being part of a leading MLOps company, I transformed an open source feature store, Feast, into a cloud native client-server system and integrated it into Kubernetes.

PUBLICATIONS Georgia Christofidi, Konstantinos Papaioannou, Thaleia Dimitra Doudali
Is Machine Learning Necessary for Cloud Resource Usage Forecasting?
In Proceedings of the 14th Symposium of Cloud Computing (SoCC '23)

Georgia Christofidi, Konstantinos Papaioannou, Thaleia Dimitra Doudali
Toward Pattern-based Model Selection for Cloud Resource Forecasting
In Proceedings of the 3rd Workshop on Machine Learning and Systems (EuroMLSys '23)
In conjunction with the 2023 European Conference on Computer Systems (EuroSys '23)

AWARDS **Distinguished Artifact Evaluator Award, EuroSys 2023**
Student Travel Scholarship Award, SoCC 2023

SERVICE **Artifact Evaluation Committees (AEC):** ASPLOS 2024, EuroSys 2024, SOSP 2023, MLSys 2023, EuroSys 2023

TRAINING

19th International Summer School on Advanced Computer Architecture and Compilation for High-performance Embedded Systems (ACACES)
HiPEAC Network, July 2023

ACM Europe Summer School on HPC Computer Architectures for AI and Dedicated Applications
Barcelona Supercomputing Center (BSC-CNS) and the Universitat Politècnica de Catalunya (UPC), July 2023

SKILLS AND TOOLS

Programming: C/C++, Java, Python, Javascript, Golang, Shell, AVR Assembly.

Machine Learning: PyTorch, TensorFlow, vLLM.

Cloud Technologies: Kubernetes, Kubeflow, Apache Spark, Apache Flink.

Database Systems: MySQL, MongoDB, PostgreSQL.

Parallel Programming: Pthreads, OpenMP, MPI, Intrinsics.

Web Technologies: NodeJS, React, Spring Boot, Flask, GraphQL.