

Emmanouil (Manos) Kariotakis

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EDUCATION

KU Leuven Doctoral Programme in Engineering Science (PhD) Department of Electrical Engineering (ESAT) Advisor: Aritra Konar	Sep 2023 - present
Technical University of Crete (TUC) BSc & MEng in Electrical and Computer Engineering Advisor: Aggelos Bletsas Grade: 9.36/10 (<i>top 1% of total school's graduates as of Oct 2022</i>) Summa cum laude	Sep 2017 - Oct 2022
High School Degree 4th High School of Heraklion, Greece Grade: 19.5/20 Nationwide University Entrance Exams: 18.053/20.000	Sep 2014 - Jul 2017

RESEARCH INTERESTS

Graph Mining, Theoretical Machine Learning, Optimization, Signal Processing

EXPERIENCE

PhD Researcher STADIUS Center for Dynamical Systems, Signal Processing and Data Analytics - ESAT, KU Leuven • Conducting research on Graph Mining	Sep 2023 - present
Research Assistant Signal Processing Laboratory, Institute of Computer Science - FORTH • Design and study of a system that leverages sparsity across input and intermediate layers of a neural network that gets trained and operates in a distributed manner by resource-constrained workers. Advisors: Grigorios Tsagkatakis , Anastasios Kyrillidis (Rice University)	Nov 2022 - Aug 2023
Undergrad Research Assistant Telecommunication Systems Research Institute (TSI), TUC • Research on asynchronous, in-network processing with probabilistic graphical model (PGM)-based inference algorithms.	Mar 2022 - Sep 2022
Research Intern Signal Processing Laboratory, Institute of Computer Science - FORTH	Jul 2020 - Aug 2020

PUBLICATIONS

- [E. Kariotakis](#) and A. Bletsas, "Probabilistic asynchronous inference in wireless networks with spectral clustering," in IEEE EUSIPCO, 2023
- [E. Kariotakis](#), G. Tsagkatakis, P. Tsakalides, A. Kyrillidis, "Leveraging Sparse Input and Sparse Models: Efficient Distributed Learning in Resource-Constrained Environments", in Conference on Parsimony and Learning (CPAL), January 2024, HKU

TEACHING ASSISTANTSHIP

CS317 – Applied Stochastic Processes Computer Science Department, University of Crete	Spring 2023
CS217 – Probability Theory Computer Science Department, University of Crete	Fall 2022

HONORS & AWARDS

Summa cum laude
Technical University of Crete

Oct 2022

SKILLS

Technical Skills	Python (PyTorch), Matlab, C, MATLAB, L ^A T _E X
Languages	English (fluent), German, Greek (native)

ACTIVITIES

- Volunteer at 2023 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)
- Degree in Music Harmony, June 2016
- Playing the piano and the guitar