

Emmanouil (Manos) Kariotakis

Geldenaaksebaan 122, Leuven, Belgium, 3001

+30 6949563453 ◊ emmanouil.kariotakis@kuleuven.be ◊ [Google Scholar](#) ◊ [LinkedIn](#) ◊

EDUCATION

KU Leuven

Sep 2023 - present

Doctoral Programme in Engineering Science (PhD)

Department of Electrical Engineering (ESAT)

Advisor: [Aritra Konar](#)

Technical University of Crete (TUC)

Sep 2017 - Oct 2022

MEng in Electrical and Computer Engineering

Advisor: [Aggelos Bletsas](#)

Grade: 9.36/10 (*top 1% of total school's graduates as of Oct 2022*)

Summa cum laude

High School Degree

Sep 2014 - Jul 2017

4th High School of Heraklion, Greece

Grade: 19.5/20

Nationwide University Entrance Exams: 18.053/20.000

RESEARCH INTERESTS

Graph Mining, Theoretical Machine Learning, Optimization, Signal Processing

EXPERIENCE

PhD Researcher

Sep 2023 - present

STADIUS Center for Dynamical Systems, Signal Processing and Data Analytics - ESAT, KU Leuven

- Conducting research on Graph Mining

Research Assistant

Nov 2022 - Aug 2023

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)

Undergrad Research Assistant

Mar 2022 - Sep 2022

Telecommunication Systems Research Institute (TSI), TUC

- Research on asynchronous, in-network processing with probabilistic graphical model (PGM)-based inference algorithms.

Research Intern

Jul 2020 - Aug 2020

Signal Processing Laboratory, Institute of Computer Science - FORTH

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

Spring 2023

Computer Science Department, University of Crete

CS217 – Probability Theory

Fall 2022

Computer Science Department, University of Crete

HONORS & AWARDS

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