Emmanouil (Manolis) Vasilakis

EDUCATION

Université Paris-Dauphine

Paris, France

Ph.D. in Theoretical Computer Science

Sept. 2022 -

- Title: "Fine-Grained Parameterized Approximation Algorithms and Complexity"
- Supervisor: Michael Lampis

National Technical University of Athens

Athens, Greece

Diploma in Electrical and Computer Engineering

Sept. 2014 - June 2021

- GPA: 8.56/10
- Master's Degree equivalent
- Specialization in Computer Science
- Thesis: "Improved algorithms for subset sum problems"

EXPERIENCE

National Center for Scientific Research «Demokritos»

Athens, Greece

Intern at the Roboskel lab of the Institute of Informatics & Telecommunications

Sept. 2020 - Oct. 2020

- Project iRTA
- Worked on autonomous robot navigation under restrictions
- Investigated and integrated navigation methods in the Robot Operating System (ROS)

RESEARCH INTERESTS

- Approximation Algorithms
- Complexity Theory
- Parameterized Algorithms

- Combinatorial Optimization
- Fine-grained Complexity
- Randomized Algorithms

PUBLICATIONS

[1] Approximating Subset Sum Ratio via Subset Sum Computations joint work with G. Alonistictis, A. Antonopoulos, N. Melissinos, A. Pagourtzis, S. F.

joint work with G. Alonistiotis, A. Antonopoulos, N. Melissinos, A. Pagourtzis, S. Petsalakis 33rd International Workshop on Combinatorial Algorithms

IWOCA 2022

[2] Faster Algorithms for k-Subset Sum and Variations

joint work with A. Antonopoulos, A. Pagourtzis, S. Petsalakis

FAW 2021

- full version in the Journal of Combinatorial Optimization

- extended abstract in the 15th Frontiers of Algorithmics Workshop

 $J.\ Comb.\ Optim.$

TECHNICAL SKILLS

• Languages: C/C++, Python, SQL, SML-NJ, Prolog

• Frameworks: OpenMP, MPI, LATEX

• Developer Tools: Git

LANGUAGES

• Greek: Native speaker

• English: Excellent knowledge (C2)

• German: Intermediate knowledge (B2)