

Panagiotis Patsilidakos

COMPUTER ENGINEER

Athens, Greece

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Interests

Algorithmic Game Theory · Algorithmic Social Choice · Algorithm Analysis and Design · Randomized Algorithms · Mechanism Design · Approximation and Online Algorithms · Computational Complexity

Education

National Technical University of Athens

School of Electrical and Computer Engineering

Athens, Greece

PH.D. IN COMPUTER SCIENCE

2018-2023

- Thesis : Mechanism Design, Social Choice and Equilibrium Computation in Restricted Domains
- Viva date : 8/9/2023
- Supervisor : Professor Dimitris Fotakis

University of Patras

School of Engineering

Patras, Greece

Computer Engineering and Informatics Department

DIPLOMA (MENG) IN COMPUTER ENGINEERING & INFORMATICS

2008 - 2016

- Thesis : Computation of approximate Nash equilibria in congestion games. (translated from Greek)
- Supervisor : Professor Ioannis Caragiannis
- Average score : 7.92/10

Selected Publications

- [1] I. Anagnostides, D. Fotakis, and P. Patsilidakos, "Metric-distortion bounds under limited information," *J. Artif. Intell. Res.*, vol. 74, pp. 1449–1483, 2022.
- [2] I. Anagnostides, D. Fotakis, and P. Patsilidakos, "Dimensionality and coordination in voting: The distortion of STV," in *AAAI*, AAAI Press, 2022, pp. 4776–4784.
- [3] D. Fotakis and P. Patsilidakos, "Strategyproof facility location in perturbation stable instances," in *WINE*, ser. Lecture Notes in Computer Science, vol. 13112, Springer, 2021, pp. 95–112.
- [4] D. Fotakis, A. V. Kandiros, T. Lianas, *et al.*, "Node-max-cut and the complexity of equilibrium in linear weighted congestion games," in *ICALP*, ser. LIPIcs, vol. 168, Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2020, 50:1–50:19.
- [5] I. Anagnostides, D. Fotakis, and P. Patsilidakos, "Asymptotically optimal communication in simple mechanisms," in *SAGT*, ser. Lecture Notes in Computer Science, vol. 12283, Springer, 2020, 17–31. *Under minor review for Theory of Computing Systems (TOCS) journal.*

Experience

Athens University of Economics and Business

Athens, Greece

POSTDOC RESEARCHER FOR PROJECT ALGOLINC: (ALGORITHMIC LEARNING THEORY AND INCENTIVES: SYNERGIES IN OPTIMIZATION AND MECHANISM DESIGN) FUNDED BY THE HFRI (HELLENIC FOUNDATION FOR RESEARCH AND INNOVATION)

2023 - present

- Carried out research on the intersection of Mechanism Design and Machine Learning.

National Technical University of Athens

School of Electrical and Computer Engineering

Athens, Greece

RESEARCHER FOR PROJECT BALSAM (BEYOND WORST-CASE ANALYSIS IN APPROXIMATION ALGORITHMS AND MECHANISM DESIGN) FUNDED BY THE HFRI (HELLENIC FOUNDATION FOR RESEARCH AND INNOVATION)

2020 - 2023

- Carried out research (on beyond worst case analysis) on mechanism design and on algorithmic social choice.

National Technical University of Athens

School of Electrical and Computer Engineering

Athens, Greece

RESEARCHER FOR PROJECT GRATOS (GRAPH THEORETICAL TOOLS FOR SCIENCES) FUNDED BY THE CYPRUS RESEARCH PROMOTION FOUNDATION

2019 - 2020

- Worked on designing and testing clustering and regression techniques for interdisciplinary problems from physics and neuroscience.

National Technical University of Athens
School of Applied Mathematical and Physical Sciences
Department of Mathematics

Athens, Greece

RESEARCHER FOR THE IREAD PROJECT (EU HORIZON 2020)

2017 - 2019

- Worked on the development of a java application with a graph visualization oriented ui.
- Design of new ePub readers architectures and software, to support interactive e-books.

Hellenic Open University
School of Science & Technology
Physics Laboratory

Patras, Greece

SYSTEM ADMINISTRATOR

2013 - 2016

- Set up, configuration and maintenance of High Performance Computer Cluster based on Slurm and Lustre.
- Centralized set up configuration and maintenance of multiple pc's, fair-share of resources between users, cluster security and user support.

University of Patras
School of Health Sciences
Department of Pharmacy

Patras, Greece

COMPUTER CENTER TECHNICIAN (INTERN)

2012 (6 month period)

- Participated in setup and connectivity of lab's personal computers.
- Participated on the deployment and maintenance of a web forum for the school's students.

University of Patras
School of Engineering
Department of Computer Engineering and informatics
Laboratory For Computing, Unix group

Patras, Greece

SYSTEM ADMINISTRATOR

2010 - 2016

- User support on services provided by the Laboratory.
- Management and Development of services, hosted on Linux systems.

Teaching Experience

National Technical University of Athens
School of Electrical and Computer Engineering

Athens, Greece

TEACHING ASSISTANT

2018 - 2023

- Undergraduate courses : Algorithms and Complexity · Introduction to Programming · Compatibility and Complexity
- Postgraduate courses : Algorithmic Game Theory · Network Algorithms and Complexity · Algorithmic Data Science

MENTORING

2018 - 2023

- 7 successful undergraduate theses (master's degree equivalent).

Some IT Skills

Programming C · C++ · Java · PHP · JavaScript · Python · Scikit-Learn · NumPy · SciPy · Pandas · Bash

Databases MySQL · PostgreSQL

Software Experience Slurm · Lustre · Apache · OpenLDAP · Bind · OpenSSH · nfs · ISC DHCP · tftp

Honors & Awards

2008 **Distinction**, Mathematics award from Hellenic American Educational Foundation

Athens, Greece

2008 **Distinction**, Informatics award from Hellenic American Educational Foundation

Athens, Greece

Other Activities

- Participation in first Greek nationwide cyberdefence exercise "PANOPTIS 2010", hosted by the Ministry of National Defense
- Part of the technical staff for the organization of 4th nationwide Free and Open Source Software Communities Meeting "FOSSCOMM 2011"
- Participation in second Greek nationwide cyberdefence exercise "PANOPTIS 2011", hosted by the Ministry of National Defence
- Member of the capture the flag challenge committee for the 5th nationwide Free and Open Source Software Communities Meeting 2012

Languages

- Greek : Mother tongue
- English : Proficient