Giannis Fikioris

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giannisfikioris.org





Research

Theoretical Computer Science, Algorithmic Game Theory, Learning Theory

Interests

Mechanism Design, No-regret Learning

Education

Cornell University

Ph.D. in Computer Science Advised by: Éva Tardos

GPA: 4.11

Aug. 2020 - Present

Ithaca, NY, USA

National Technical University of Athens

Bsc in Electrical and Computer Engineering

Advised by: Dimitris Fotakis

GPA: $9.74/10 - 2^{nd}$ out of 298 graduates in 2019

SEP. 2014 - SEP. 2019 Athens, Greece

Publications

Online Resource Sharing via DMMF: Efficiency, Robustness and Non-Stationarity

arXiv pre-print,

Giannis Fikioris, Siddhartha Banerjee, Éva Tardos.

Approximately Stationary Bandits with Knapsacks

Conference on Learning Theory (COLT) 2023,

Giannis Fikioris. Éva Tardos.

Liquid Welfare guarantees for No-Regret Learning in Sequential Budgeted Auctions

ACM Conference on Economics and Computation (EC) 2023,

Giannis Fikioris. Éva Tardos.

Robust Pseudo-Markets for Reusable Public Resources

ACM Conference on Economics and Computation (EC) 2023,

Siddhartha Banerjee, Giannis Fikioris, Éva Tardos.

Karma: Resource Allocation for Dynamic Demands

OSDI 2023, USENIX Symposium on Operating Systems Design and Implementation,

Midhul Vuppalapati, Giannis Fikioris, Rachit Agarwal, Asaf Cidon, Anurag Khandelwal, Éva Tardos.

An extension to "A subsemigroup of the rook monoid"

Semigroup Forum (accepted in 2023),

George Fikioris, Giannis Fikioris.

Incentives in Dominant Resource Fair Allocation under Dynamic Demands

arXiv pre-print,

Giannis Fikioris, Rachit Agarwal, Éva Tardos.

A subsemigroup of the rook monoid

Semigroup Forum (accepted in 2022),

George Fikioris, Giannis Fikioris.

Optimizing Vessel Trajectory Compression for Maritime Situational Awareness

GeoInformatica (accepted in 2022),

Giannis Fikioris, Kostas Patroumpas, Alexander Artikis, George Paliouras, Manos Pitsikalis.

Mechanism Design for Perturbation Stable Combinatorial Auctions

Symposium on Algorithmic Game Theory (SAGT) 2020,

Theory of Computing Systems.

Giannis Fikioris, Dimitris Fotakis.

Fine-Tuned Compressed Representations of Vessel Trajectories

ACM International Conference on Information and Knowledge Management (CIKM) 2020, Giannis Fikioris, Kostas Patroumpas, Alexander Artikis, George Paliouras, Manos Pitsikalis.

Optimizing Vessel Trajectory Compression

Maritime Big Data Workshop (MBDW) 2020,

Giannis Fikioris, Kostas Patroumpas, Alexander Artikis.

Work Experience Google Research G

Sep. 2023 - Nov. 2023

Student Researcher Mountain View, California
Advised by Mingfei Zhao & Gagan Aggarwal, Algorithms & Optimization Group

National Centre for Scientific Research "Demokritos"

Aug. 2019 – Jul. 2020

Research Associate

Athens, Greece

Advised by Alexander Artikis, Complex Event Recognition Group

Teaching experience

Cornell University

FALL 2020

Teaching Assistant, CS 4820 Introduction to Analysis of Algorithms

Ithaca, NY, USA

Instructor: Dexter Kozen

Cornell University

Spring 2021

Teaching Assistant, CS 3110 Data Structures and Functional Programming

Ithaca, NY, USA

Instructor: Michael Clarkson

National Technical University of Athens

FALL 2019

Teaching Assistant, Algorithms and Complexity

Athens, Greece

Instructor: Dimitris Fotakis

Awards

Cornell Conference Grant, Cornell University

2023

Awards \$700 to attend a professional conference to present.

NDSEG Fellowship, Cornell University

2022 - 2025

Offers full tuition and a monthly stipend for three years.

NSF GRFP Fellowship, Cornell University

2022

Offers partial tuition and a monthly stipend for three years (declined in favor of NDSEG).

Gerondelis Fellowship, Cornell University

2021

Papakyriakopoulos Award, National Technical University of Athens

2015

For highest grade in Mathematics-related courses in the 1st and 2nd semesters

Kritikos Grant, National Technical University of Athens

2015

For highest grade in Mathematics-related courses during the 1st academic year

Competitive Programming

2017 - 2019

1st and 2nd in Greece: IEEEXtreme 11.0 & 12.0, Google Hash Code 2018, ACM/ICPC SEERC 2019

National Mathematical Competition, Hellenic Mathematical Society

2009 - 2014

Various distinctions and medals

Service and Outreach

Helping URM Applicants with Graduate School Applications

FALL 2022

Program aimed to help underrepresented students with their graduate school applications.

Expanding Your Horizons at Cornell

Spring 2022

Participated in workshop that aims to encourage middle/high-school girls to pursue science and math.

ACSU Computer Science Research Night at Cornell

Fall 2021 and 2022

Presented my research to undergraduate students, to encourage them to participate in CS research.

Computer Science Undergraduate Research Program

Summer 2021

Worked with an undergraduate female student and professor Éva Tardos on a problem about information cascade in graphs.

Skills Programming

C/C++, Python, Java, Haskell, OCaml, Prolog Lager, Matlab, Mathematica

Languages

English (fluent), Greek (native), German (intermediate)