# Giannis Fikioris

Email: gfikioris@cs.cornell.edu

giannisfikioris.org



Aug. 2020 - Present



Research

Theoretical Computer Science, Algorithmic Game Theory, Learning Theory

Interests Mechanism Design, Online Learning

Education Cornell University

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

GPA: 4.11

SEP. 2014 - SEP. 2019

Athens, Greece

Ithaca, NY, USA

Advised by: *Dimitris Fotakis* 

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

National Technical University of Athens

Bsc in Electrical and Computer Engineering

Work Google Research G

Experience

SEP. 2023 - Nov. 2023 Student Researcher Mountain View, California

Advised by Mingfei Zhao & Gagan Aggarwal, Market Algorithms Team

National Centre for Scientific Research "Demokritos" Aug. 2019 - Jul. 2020 Research Associate Athens, Greece

Advised by Alexander Artikis, Complex Event Recognition Group

No-Regret Algorithms in non-Truthful Auctions with Budget and ROI Constraints Publications

WWW 2025, The Web Conference,

Gagan Aggarwal, Giannis Fikioris, Mingfei Zhao.

Allocating Public Goods via Dynamic Max-Min Fairness: Long-Run Behavior and Equilibria

SIGMETRICS 2025, ACM Special Interest Group (SIG) for Computer Performance Evaluation,

Siddhartha Banerjee, Giannis Fikioris, Chido Onyeze, Éva Tardos.

Learning in Budgeted Auctions with Spacing Objectives

arXiv pre-print,

Giannis Fikioris, Robert Kleinberg, Yoav Kolumbus, Raunak Kumar, Yishay Mansour, Éva Tardos.

Incentives in Dominant Resource Fair Allocation under Dynamic Demands

SAGT 2024, Symposium on Algorithmic Game Theory,

Giannis Fikioris, Rachit Agarwal, Éva Tardos.

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

arXiv pre-print,

Giannis Fikioris, Siddhartha Banerjee, Éva Tardos.

An extension to "A subsemigroup of the rook monoid"

Semigroup Forum (accepted in 2023),

George Fikioris, Giannis Fikioris.

Approximately Stationary Bandits with Knapsacks

COLT 2023, Conference on Learning Theory,

Giannis Fikioris, Éva Tardos.

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

EC 2023, ACM Conference on Economics and Computation,

Mathematics of Operations Research (accepted in 2024),

Giannis Fikioris. Éva Tardos.

#### Robust Pseudo-Markets for Reusable Public Resources

EC 2023, ACM Conference on Economics and Computation, 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.

# 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, Kosta Patroumpas, Alexander Artikis, George Paliouras, Manos Pitsikalis.

# Mechanism Design for Perturbation Stable Combinatorial Auctions

SAGT 2020, Symposium on Algorithmic Game Theory,

Theory of Computing Systems,

Giannis Fikioris, Dimitris Fotakis.

#### Fine-Tuned Compressed Representations of Vessel Trajectories

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

# **Optimizing Vessel Trajectory Compression**

MBDW 2020, Maritime Big Data Workshop,

Giannis Fikioris, Kostas Patroumpas, Alexander Artikis.

# Teaching experience

#### **Cornell University**

Teaching Assistant, CS 4820 Introduction to Analysis of Algorithms

Ithaca, NY, USA

Instructor: Dexter Kozen

**Cornell University** 

Spring 2021

**FALL 2020** 

Teaching Assistant, CS 3110 Data Structures and Functional Programming

Ithaca, NY, USA

Instructor: Michael Clarkson

#### **National Technical University of Athens**

Teaching Assistant, Algorithms and Complexity

Athens, Greece

**FALL 2019** 

Instructor: Dimitris Fotakis

#### Awards

#### Google PhD Fellowship, Cornell University

Jan. 2025 – Aug. 2026

Full tuition and fees plus a stipend for two years.

# Cornell Conference Grant, Cornell University

2023, 2024

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

#### **Onassis Scholarship**, Cornell University

2022 - 2025

Additional financial support over three years.

#### **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 Scholarship**, Cornell University

2021

One time financial support.

#### **Papakyriakopoulos Award**, National Technical University of Athens

2015

For highest grade in Mathematics-related courses in the 1<sup>st</sup> and 2<sup>nd</sup> semesters.

For highest grade in Mathematics-related courses during the 1<sup>st</sup> academic year.

# 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** 

Helped 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.

# **Conference Reviewer**

JMLR, WWW 2025, ALT 2025, NeurIPS 2023, ALT 2024.

#### **Skills Programming**

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

#### Languages

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