# Giannis Fikioris

giannisfikioris.org **Email**: gfikioris@cs.cornell.edu Research Theoretical Computer Science, Algorithmic Game Theory, Learning Theory Interests Mechanism Design, Online Learning Education Cornell University Aug. 2020 - Present Ph.D. in Computer Science Ithaca, NY, USA Advised by: Éva Tardos GPA: 4.11 National Technical University of Athens SEP. 2014 - SEP. 2019 Bsc in Electrical and Computer Engineering Athens, Greece Advised by: *Dimitris Fotakis* GPA:  $9.74/10 - 2^{nd}$  out of 298 graduates in 2019 Work Google Research G Mar. 2025 - Present New York Experience Student Researcher Advised by Yuan Deng & Balu Sivan & Renato Paes Leme, Market Algorithms Team Google Research 🧲 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 Google PhD Fellowship, Cornell University Awards 2025 - 2026Full tuition and fees plus a stipend for two years. **Onassis Scholarship**, Cornell University 2022 - 2025Additional financial support over three years. NDSEG Fellowship, Cornell University 2022 - 2025Offers 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. Competitive Programming, National Technical University of Athens 2017 - 20191st and 2nd places in Greece: IEEEXtreme 11.0 & 12.0, Google Hash Code 2018, ACM/ICPC SEERC. 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. **Kritikos Grant**, *National Technical University of Athens* 2015 For highest grade in Mathematics-related courses during the 1<sup>st</sup> academic year. Learning in Budgeted Auctions with Spacing Objectives Publications 2025 EC 2025, ACM Conference on Economics and Computation, Giannis Fikioris, Robert Kleinberg, Yoav Kolumbus, Raunak Kumar, Yishay Mansour, Eva Tardos. Beyond Worst-Case Online Allocation via Dynamic Max-min Fairness

EC 2025, ACM Conference on Economics and Computation,

Giannis Fikioris, Siddhartha Banerjee, Éva Tardos.

# Online Resource Sharing: Better Robust Guarantees via Randomized Strategies

IJCAI 2025, International Joint Conference on Artificial Intelligence,

David X. Lin, Daniel Hall, Giannis Fikioris, Siddhartha Banerjee, Éva Tardos.

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

WWW 2025, The Web Conference,

Gagan Aggarwal, Giannis Fikioris, Mingfei Zhao.

# Online Resource Sharing: Better Robust Guarantees via Randomized Strategies arXiv pre-print,

David X. Lin, Siddhartha Banerjee, Giannis Fikioris, Éva Tardos.

# 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.

## Incentives in Dominant Resource Fair Allocation under Dynamic Demands

SAGT 2024, Symposium on Algorithmic Game Theory,

Giannis Fikioris, Rachit Agarwal, Éva Tardos.

# An extension to "A subsemigroup of the rook monoid"

2023

2024

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

2022

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

reaching 13535tant, C5 5110 Data 511 actures and 1 anctional 1 rogramm

Ithaca, NY, USA

Instructor: Michael Clarkson

**National Technical University of Athens** 

FALL 2019 Athens, Greece

Teaching Assistant, Algorithms and Complexity

Instructor: Dimitris Fotakis

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** 

EC2025, TCS, JMLR, WWW 2025, ALT 2025, NeurIPS 2023, ALT 2024.

Skills

**Programming** 

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

Languages

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