

# Giannis Fikioris

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Email: [gfikioris@cs.cornell.edu](mailto:gfikioris@cs.cornell.edu)


[giannisfikioris.org](https://giannisfikioris.org)




**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  
Advised by: *Éva Tardos*  
GPA: 4.11  
*Ithaca, NY, USA*

**National Technical University of Athens**  SEP. 2014 – SEP. 2019  
Bsc in Electrical and Computer Engineering  
Advised by: *Dimitris Fotakis*  
GPA: 9.74/10 – 2<sup>nd</sup> out of 298 graduates in 2019  
*Athens, Greece*

**Work** **Google Research**  SEP. 2023 – NOV. 2023  
**Experience** *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*

**Publications** **No-Regret Algorithms in non-Truthful Auctions with Budget and ROI Constraints**  
*arXiv pre-print*,  
Gagan Aggarwal, Giannis Fikioris, Mingfei Zhao.

**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**  
*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 Vuppapapati, Giannis Fikioris, Rachit Agarwal, Asaf Cidon, Anurag Khandelwal, Éva Tardos.

**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.

**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 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**Competitive Programming**

2017 – 2019

1<sup>st</sup> and 2<sup>nd</sup> in Greece: IEEEExtreme 11.0 & 12.0, Google Hash Code 2018, ACM/ICPC SEERC 2019**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**

NeurIPS 2023, ALT 2024.

**Skills****Programming**

C/C++, Python, Java, Haskell, OCaml, Prolog,  $\text{\LaTeX}$ , Matlab, Mathematica

**Languages**

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