

# Giannis Fikioris

Updated February 28, 2024


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


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




**Research Interests** Theoretical Computer Science, Algorithmic Game Theory, Learning Theory  
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 Experience** **Google Research**  SEP. 2023 – NOV. 2023  
*Student Researcher*  
Advised by Mingfei Zhao & Gagan Aggarwal, *Market Algorithms Team*  
*Mountain View, California*

**National Centre for Scientific Research “Demokritos”**  AUG. 2019 – JUL. 2020  
*Research Associate*  
Advised by Alexander Artikis, *Complex Event Recognition Group*  
*Athens, Greece*

**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**Teaching Assistant, CS 4820 *Introduction to Analysis of Algorithms*Instructor: *Dexter Kozen*

FALL 2020

*Ithaca, NY, USA***Cornell University**Teaching Assistant, CS 3110 *Data Structures and Functional Programming*Instructor: *Michael Clarkson*

SPRING 2021

*Ithaca, NY, USA***National Technical University of Athens**Teaching Assistant, *Algorithms and Complexity*Instructor: *Dimitris Fotakis*

FALL 2019

*Athens, Greece***Awards****Cornell Conference Grant, Cornell University**

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

2023

**Onassis Scholarship, Cornell University**

Additional financial support over three years.

2022 – 2025

**NDSEG Fellowship, Cornell University**

Offers full tuition and a monthly stipend for three years.

2022 – 2025

**NSF GRFP Fellowship, Cornell University**

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

2022

**Gerondelis Scholarship, Cornell University**

One time financial support.

2021

**Papakyriakopoulos Award, National Technical University of Athens**For highest grade in Mathematics-related courses in the 1<sup>st</sup> and 2<sup>nd</sup> semesters

2015

**Kritikos Grant, National Technical University of Athens**For highest grade in Mathematics-related courses during the 1<sup>st</sup> academic year

2015

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

2017 – 2019

**Service and  
Outreach****Helping URM Applicants with Graduate School Applications**

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

FALL 2022

**Expanding Your Horizons at Cornell**

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

SPRING 2022

**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)