

# Giannis Fikioris

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



**Research** Theoretical Computer Science, Algorithmic Game Theory, Learning Theory  
**Interests** Mechanism Design, No-regret 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*

**Publications** **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”**  
*arXiv pre-print*,  
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.

### 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*

### Work Experience

#### **National Centre for Scientific Research “Demokritos”**

Position: Research Associate  
Advised by Alexander Artikis, *Complex Event Recognition Group*

AUG. 2019 – JUL. 2020

*Athens, Greece*

### Awards

#### **NDSEG Fellowship, Cornell University**

Offers full tuition and a monthly stipend for three years.

SEP. 2022 – AUG. 2025

#### **NSF GRFP Fellowship, Cornell University**

Offers partial tuition and a monthly stipend for three years.

2022

#### **Gerondelis Fellowship, Cornell University**

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

#### **National Mathematical Competition, Hellenic Mathematical Society**

Various distinctions and medals

2009 – 2014

### 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**

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

SPRING 2022

#### **ACSU Computer Science Research Night at Cornell**

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

FALL 2021 AND 2022

#### **Computer Science Undergraduate Research Program**

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

SUMMER 2021

### Skills

#### **Programming**

C/C++, Python, Java, Haskell, OCaml, Prolog  
L<sup>A</sup>T<sub>E</sub>X, Matlab, Mathematica

#### **Languages**

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