

Assistant Professor of Information Systems
W.P. Carey School of Business
Arizona State University

[illegible]

- **Cornell Fellowship** 2020
One-year fully funded fellowship by the CS department based on “exceptional preparation and promise”.
- **Thomaidion Award** 2019
Awarded by NTUA for publications during undergraduate
- **ESEC/FSE 2019 ACM Student Research Competition Finalist** 2019
- **CanSat International Space Engineering Competition** 2019
4th out of 93 teams. Organized by the American Astronautical Society (AAS).
- **2nd prize “be finnovative 2.0” Start-up Accelerator by National Bank of Greece** 2018
Cashierless payments start-up.
- **1st prize at “Crowdhackathon Fintech #2” by the National Bank of Greece** 2017
Cashierless payments start-up.
- **IEEEExtreme 11.0 Programming Competition** 2017
Top 1% worldwide in IEEE’s algorithms competition.
- **Touramanoglu Scholarship** 2015
Highest University Entrance Exams score in the Imittos region.
- **“The Great Moment of Education” Scholarship by Eurobank SA** 2015
Highest University Entrance Exams score in the Imittos region.

PAPERS

[Google Scholar Profile](#)

$\alpha\beta$ = alphabetical order

* = equal contribution

Journal Papers

- [J1] **Network Formation and Dynamics among Multi-LLMs**
Marios Papachristou, Yuan Yuan
PNAS Nexus (to appear), 2025
Preliminary version presented at the International Conference on Computational Social Science (IC2S2) and the NSF Conference in Network Science and Economics
[\[preprint\]](#) [\[code\]](#) [\[slides\]](#)
- [J2] **volesti: A C++ library for sampling and volume computation on convex bodies**
Apostolos Chalkis*, Vissarion Fisikopoulos*, *Marios Papachristou**, Elias Tsigaridas*
Journal of Open Source Software, 2025
[\[paper\]](#) [\[code\]](#)
- [J3] **Differentially Private Distributed Estimation and Learning**
Marios Papachristou, Amin Rahimian
IJSE Transactions, 2024
Featured at the July 2025 issue of the ISE Magazine and the University of Pittsburgh Swanson School of Engineering
[\[paper\]](#) [\[code\]](#) [\[talk\]](#) [\[news\]](#) [\[news\]](#)
- [J4] **Sublinear Domination and Core-periphery Networks**
Marios Papachristou
Scientific Reports (Nature Portfolio), 2021
[\[paper\]](#) [\[code\]](#)
- [J5] **Truncated Log-concave Sampling for Convex Bodies with Reflective Hamiltonian Monte Carlo**
 $\alpha\beta$ Apostolos Chalkis, Vissarion Fisikopoulos, *Marios Papachristou*, Elias Tsigaridas
ACM Transactions on Mathematical Software (TOMS), 2023
[\[paper\]](#) [\[code\]](#)

- [J6] **Commons-based peer production and digital fabrication: The case of a RepRap-based, Lego-built 3D printing-milling machine**
Vasilis Kostakis*, and *Marios Papachristou**
Telematics and Informatics, 2014
[\[paper\]](#)

Refereed CS Conference Proceedings

- [C1] **Leveraging Large Language Models for Collective Decision-Making**
Marios Papachristou, Longqi Yang, Chin-Chia Hsu
CSCW '25: *ACM SIGCHI Conference on Computer-Supported Cooperative Work & Social Computing (CSCW)*, 2025
Invited talk at the LLMs as Research Tools Workshop at ACM CHI 2024
[\[preprint\]](#) [\[slides\]](#)
- [C2] **Dynamic Interventions for Networked Contagions**
Marios Papachristou, Sid Banerjee, Jon Kleinberg
WWW '23: *ACM Web Conference (WWW), Economics and Markets Track*, 2023
[\[paper\]](#) [\[code\]](#) [\[poster\]](#) [\[slides\]](#)
- [C3] **Core-periphery Models for Hypergraphs**
Marios Papachristou, Jon Kleinberg
KDD '22: *ACM Intl. Conf. on Knowledge Discovery and Data Mining (KDD)*, 2022
[\[paper\]](#) [\[code\]](#) [\[data\]](#) [\[slides\]](#) [\[poster\]](#)
- [C4] **Allocating Stimulus Checks in Times of Crisis**
Marios Papachristou, Jon Kleinberg
WWW '22: *ACM Web Conference (WWW), Economics and Markets Track*, 2022
Featured by the Federal Reserve Bank of Minneapolis
[\[paper\]](#) [\[code\]](#) [\[talk\]](#) [\[slides\]](#) [\[news\]](#)
- [C5] **Software Clusterings with Vector Semantics and the Call Graph**
Marios Papachristou
ESEC/FSE '19: *ACM Joint Meeting on European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE)*, 2019
ESEC/FSE Student Research Competition Finalist Paper
[\[paper\]](#) [\[code\]](#) [\[data\]](#)

Revisions & Working Papers

- [WP1] **Optimal Resource Allocation for Remediating Networked Contagions**
Marios Papachristou, Sid Banerjee, Jon Kleinberg
Revised and Resubmitted, Management Science, 2024
[\[preprint\]](#) [\[slides\]](#)
- [WP2] **Group Decision-Making among Privacy-aware Agents**
Marios Papachristou, Amin Rahimian
Revised and Resubmitted, Operations Research, 2024
Preliminary version presented at the Theory and Practice of Differential Privacy Workshop (TPDP)
[\[preprint\]](#) [\[talk\]](#)
- [WP3] **Structural Measures of Resilience for Supply Chains**
Marios Papachristou, Amin Rahimian
R&R, Management Science, 2024
[\[preprint\]](#) [\[code\]](#) [\[slides\]](#)
- [WP4] **The Power of Choice in Random Sampling**
Marios Papachristou, Jon Kleinberg

Working paper, 2024
Preprint available upon request

- [WP5] **Echoes of Disagreement: Measuring Disparity in Social Consensus**
Marios Papachristou, Jon Kleinberg
Working paper, 2024
[\[preprint\]](#) [\[code\]](#)

Refereed CS Workshops

- [W1] **GLINKX: A Scalable Unified Framework for Homophilous and Heterophilous Graphs**
Marios Papachristou, Rishab Goel, Frank Portman, Matt Miller, Rong Jin
NeurIPS workshop on Graph Learning Frontiers (GLFrontriers), 2022
[\[paper\]](#) [\[poster\]](#)

SOFTWARE **volesti** github.com/GeomScale/volesti
Open-source C++ statistical software for sampling and volume approximation from convex bodies.

OTHER **GeomScale Open-source Organization** *May 2020 – March 2020*
EXPERIENCE Sampling from truncated log-concave densities, and convex optimization, working on the [volesti](#) open-source package *with Dr. Apostolos Chalkis, Dr. Vissarion Fisikopoulos, and Dr. Elias Tsigaridas*

Cashierless Payments Start-up *2017 – 2018*
Part of National Bank of Greece’s start-up accelerator

Athens University of Economics and Business *2018 – 2020*
Department of Management Science and Technology, *with Prof. Diomidis Spinellis*

Google Summer of Code 2020 (GeomScale) *June 2020 – August 2020*
Sampling from high-dimensional truncated log-concave densities, *with Dr. Apostolos Chalkis, Dr. Vissarion Fisikopoulos, and Dr. Elias Tsigaridas*
[\[code\]](#) [\[talk\]](#)

Google Summer of Code 2018 (GFOSS-OTA) *April 2018–September 2018*
Automated codification of Greek Legislation, *with Prof. Diomidis Spinellis*
[\[code\]](#) [\[data\]](#) [\[talk\]](#)

Researcher – P2P Lab *2013 – 2014*

TEACHING & – Machine Learning in Business (MSBA and MBA, ASU) *Fall 2025*
MENTORSHIP – The Structure of Information Networks (PhD-level, Cornell) *Spring & Fall 2023*
EXPERIENCE – Discrete Mathematics (NTUA) *Spring 2017*
 – Programming Techniques (NTUA) *Spring 2016*
 – Introduction to Computer Programming (NTUA) *Fall 2016, Fall 2017*
 – Student-applicant Support Program at Cornell CIS *2022*
 – Google Summer of Code Mentor *2019–2022*
 – Volunteer lessons for the National Olympiad of Informatics (PDP) *2019*

TALKS & • **Resilience in Networks: Frameworks for Resource Allocation and Simulation**
LECTURES – Archimedes, Athena RC *April 2025*

† = scheduled

* = presented by co-author

- TOC4Fairness Seminar, Simons Institute March 2025
- Cornell University, Theory Seminar December 2024
- Arizona State University, W.P. Carey School of Business November 2024
- Purdue University, Daniels School of Business November 2024
- MIT, Research Group Meeting June 2024
- ***Network Formation and Dynamics among Multi-LLMs***
 - Symposium on Statistical Challenges on Electronic Commerce Research (SCECR) June 2025
 - Arizona State University, Machine Learning Day April 2025
 - NSF Conference on Network Science and Economics April 2025
 - INFORMS Annual Meeting October 2024
 - IBM Research, Exploratory Math Sciences Council Seminar April 2024
 - UIUC, Guest Lecture at the Network Analysis Course April 2024
 - Cornell University, AIPP Group March 2024
 - Learning on Graphs (LoG) NYC Meetup February 2024
- ***Information Aggregation and Distributed Learning in Privacy-critical Environments***
 - TOC4Fairness Online Seminar Series* March 2024
 - Information: Theory and Applications (ITA) Workshop* February 2024
 - Rutgers University Business School, Seminar* November 2023
- ***Leveraging Large Language Models for Collective Decision-Making***
 - LLMs as Research Tools: Applications and Evaluations in HCI Data Work Workshop, ACM Conference on Human-Computer Interaction* May 2024
 - Microsoft Research, Invited Applied Research Talks August 2023
- ***Structural Measures of Resilience for Supply Chains***
 - NSF Conference on Network Science and Economics April 2024
 - Columbia University, Student Theory Seminar November 2023
 - Cornell University, Theory Tea November 2023
 - INFORMS Annual Meeting* October 2023
 - Cornell University, LinkedIn Campus Visit May 2023
- ***Resource Allocation in a Financial Contagion Environment***
 - University of Chicago, Theory Seminar October 2023
 - Indiana University, Center for Complex Networks and Systems Research September 2023
 - Cornell University, CS 6850 Guest Lecture April 2023
 - Cornell University, Theory Seminar November 2022
- ***Dynamic Interventions for Networked Contagions***
 - INFORMS Annual Meeting October 2023
 - ACM Web Conference April 2023
 - ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization October 2022
- ***Core-periphery Models for Hypergraphs***
 - ACM Conference on Knowledge Discovery and Data Mining August 2022
- ***GLINKX: A Scalable Unified Framework for Homophilous and Heterophilous Graphs***
 - NeurIPS Workshop on Graph Learning Frontiers December 2022
 - Twitter, Machine Learning Seminar August 2022
- ***Allocating Stimulus Checks in Times of Crisis***
 - ACM Web Conference April 2022
 - ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization October 2021
- ***Sampling from Truncated High Dimensional Logconcave Densities***
 - PyData Global December 2020
- ***Software Clusterings with Vector Semantics and the Call Graph***

- ACM Joint Meeting on European Software Engineering Conference and Symposium on the Foundations of Software Engineering *August 2019*

PROFESSIONAL SERVICE

Program Committee

- ACM Conference on Fairness Accountability and Transparency (FAccT)
- ACM Conference on Knowledge Discovery and Data Mining (KDD)

Reviewer

- Management Science
- Mathematics of Operation Research
- Journal of Artificial Intelligence Research
- Naval Research Logistics
- International Conference on Computational Social Science (IC2S2)
- ACM Web Conference (WWW)
- Innovations in Theoretical Computer Science (ITCS)
- ACM Conference on Human Factors in Computing (CHI)
- European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD)
- Machine Learning (Springer)
- NeurIPS 2022 Workshop on Graph Learning Frontiers (GLFrontiers)
- NeurIPS 2021 Workshop on Human and Machine Decisions
- Journal of Open Source Software

Session Chair

- INFORMS Annual Meeting *2025*
- NSF Conference on Network Science and Economics *2024*
- ACM Web Conference (WWW) *2022*

REFERENCES

Jon Kleinberg (kleinberg@cornell.edu)
Dept. of Computer and Information Science, Cornell University

Siddhartha Banerjee (sbanerjee@cornell.edu)
School of Operations Research and Information Engineering, Cornell University

Amin Rahimian (rahimian@pitt.edu)
Department of Industrial Engineering, University of Pittsburgh

Yuan Yuan (yuyuan@ucdavis.edu)
OpenAI and Graduate School of Management, UC Davis

Longqi Yang (longqi.yang@microsoft.com)
Office of Applied Research, Microsoft Research

Chin-Chia Hsu (chinchia.k.hsu@gmail.com)
Google DeepMind

Yong-Yeol Ahn (yyahn@iu.edu)
Dept. of Informatics, Computing, and Engineering, Indiana University

LAST UPDATED

September 25, 2025