

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

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| PERSONAL INFORMATION | E-mail Phone Website Office Nationality | mpapachr@asu.edu +1-480-727-5771 papachristoumarios.github.io 400 E Lemon St, BAC 685, Tempe, AZ 85281 Greek, US Permanent Resident (Green Card Holder) |
| RESEARCH | Network Economics, Platforms, AI agents, Privacy, Computational Social Science | |
| EMPLOYMENT | W.P. Carey School of Business, Arizona State University Tenure-Track Assistant Professor, Department of Information Systems • Affiliated Member, Center for AI and Data Analytics (AIDA) | 2025 – |
| | Microsoft Research Office of Applied Research, <i>with Chin-Chia Hsu and Longqi Yang</i> | Summer 2023 |
| | Twitter User Modeling Research Group, <i>with Rishab Goel, Frank Portman, Matt Miller</i> | Summer 2022 |
| EDUCATION | Cornell University Ph.D. in Computer Science, Minor: <i>Applied Mathematics</i> – <i>Doctoral Advisor:</i> Jon Kleinberg – <i>Thesis Title:</i> From Contagion to Stability: Insights into Network Dynamics, Resilience and Stability | 2020 – 2025 |
| | M.S. in Computer Science | 2020 – 2022 |
| | National Technical University of Athens Diploma in Electrical and Computer Engineering – <i>Advisor:</i> Dimitris Fotakis | 2015 – 2020 |
| HONORS & AWARDS | <ul style="list-style-type: none">– ACM Doctoral Dissertation Award Nominee 2025 Nominated to the ACM by Cornell's CS department as the best Ph.D. thesis in CS awarded in 2025.– ACM/AAAI SIGAI Doctoral Dissertation Award Nominee 2025 Nominated to the ACM SIGAI by Cornell's CS department as the best Ph.D. thesis in AI awarded in 2025.– Sigma Xi 2025 Elected member based on scientific contributions.– Cornell ORIE Young Researchers Workshop 2024– Alexander A. Onassis Scholarship 2023 Three-year fellowship for Greek Ph.D. students. Acceptance rate: 16%.– Bodossaki Foundation Fellowship 2023 Runner-up.– LinkedIn Ph.D. Fellowship 2022 One-year fully funded fellowship by LinkedIn. Acceptance rate 14%.– A.G. Leventis Scholarship 2022 Award for graduate students of Greek origin. Acceptance rate 12.5%. | |

- **Gerondelis Scholarship** 2022
One-time award for graduate students of Greek descent.
- **Chateaubriand Fellowship** 2022
Fellowship granted by the French Embassy in the US for studies in France (declined for personal reasons). Acceptance rate 33%.
- **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 publication during undergraduate studies.
- **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.

JOURNAL PAPERS

[Google Scholar Profile](#)

$\alpha\beta$ = alphabetical order

* = equal contribution

\circ = corresponding author

[J1] Network Formation and Dynamics among Multi-LLMs

Marios Papachristou, Yuan Yuan
PNAS Nexus, 2025

[\[preprint\]](#) [\[code\]](#)

- *Taught at UC Berkeley, Stanford, UIUC and others*
- *Featured by PNAS Nexus at EurekAlert! [news]*
- *Featured by TechXplore [news]*

[J2] Leveraging Large Language Models for Collective Decision-Making

Marios Papachristou, Longqi Yang, Chin-Chia Hsu
Proceedings of the ACM on Human Computer Interaction (presented at ACM CSCW '25), 2025

[\[paper\]](#)

- *Invited talk at the LLMs as Research Tools Workshop at ACM CHI 2024*
- *Featured by the ACM [news]*

[J3] **volesti**: A C++ library for sampling and volume computation on convex bodies

$\alpha\beta$ Apostolos Chalkis*, Vissarion Fisikopoulos*, *Marios Papachristou**, Elias Tsigaridas*

Journal of Open Source Software, 2025

[\[paper\]](#) [\[code\]](#)

[J4] Differentially Private Distributed Estimation and Learning

Marios Papachristou, Amin Rahimian

IISE Transactions, 2025

and the University of Pittsburgh Swanson School of Engineering

[\[paper\]](#) [\[code\]](#) [\[talk\]](#)

- *Featured at the July 2025 issue of the ISE Magazine [news]*

- *Featured by the University of Pittsburgh Swanson School of Engineering* [[news](#)]
- [J5] **Truncated Log-concave Sampling for Convex Bodies with Reflective Hamiltonian Monte Carlo**
 $\alpha\beta$ Apostolos Chalkis, Vissarion Fisikopoulos, *Marios Papachristou*^o, Elias Tsigaridas
ACM Transactions on Mathematical Software (TOMS), 2023
[\[paper\]](#) [\[code\]](#)
– *Featured at ODBMS.org* [[news](#)]
- [J6] **Sublinear Domination and Core-periphery Networks**
Marios Papachristou
Scientific Reports, 2021
[\[paper\]](#) [\[code\]](#)
- [J7] **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
[\[paper\]](#)
- TOP-TIER CS
CONFERENCE
PROCEEDINGS
- [C1] **Dynamic Interventions for Networked Contagions**
Marios Papachristou, Sid Banerjee, Jon Kleinberg
WWW '23: ACM Web Conference (WWW), 2023
[\[paper\]](#) [\[code\]](#)
– Acceptance rate: 17%
- [C2] **Core-periphery Models for Hypergraphs**
Marios Papachristou, Jon Kleinberg
KDD '22: ACM Intl. Conf. on Knowledge Discovery and Data Mining (KDD), 2022
[\[paper\]](#) [\[code\]](#) [\[data\]](#)
– Acceptance rate: 15%
– Taught at tutorials at KDD and CIKM
- [C3] **Allocating Stimulus Checks in Times of Crisis**
Marios Papachristou, Jon Kleinberg
WWW '22: ACM Web Conference (WWW), 2022
[\[paper\]](#) [\[code\]](#)
– Acceptance rate: 17%
– Featured by the Federal Reserve Bank of Minneapolis [[news](#)]
– Taught at UC Berkeley
- [C4] **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
[\[paper\]](#) [\[code\]](#) [\[data\]](#)
– Acceptance rate: 21%
– ESEC/FSE Student Research Competition Finalist Paper
- REVISIONS &
WORKING PAPERS
- [WP1] **Structural Measures of Resilience for Supply Chains**
Marios Papachristou, Amin Rahimian
Major revision, Production and Operations Management, 2024
[\[preprint\]](#) [\[code\]](#) [\[slides\]](#)
- [WP2] **Echoes of Disagreement: Measuring Disparity in Social Consensus**
Marios Papachristou, Jon Kleinberg
Under review, INFORMS Journal of Computing, 2024
[\[preprint\]](#) [\[code\]](#)

[WP3] **The Price of Misreporting: Measuring the Effect of Adversarial Behavior in Online Platforms**

Marios Papachristou, Akhil Jalan

Conference version under review at ACM Web Conference (WWW),

Journal version under preparation for submission to Information Systems Research, 2025

[\[preprint\]](#) [\[code\]](#)

[WP4] **Optimal Resource Allocation for Remediating Networked Contagions**

Marios Papachristou, Sid Banerjee, Jon Kleinberg

Under preparation for submission to Operations Research, 2024

[\[preprint\]](#) [\[slides\]](#)

[WP5] **Group Decision-Making among Privacy-aware Agents**

Marios Papachristou, Amin Rahimian

Under preparation for submission to INFORMS Journal of Computing, 2024

Preliminary version presented at the Theory and Practice of Differential Privacy Workshop (TPDP)

[\[preprint\]](#) [\[talk\]](#)

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 (GLFrontiers), 2022

[\[paper\]](#) [\[poster\]](#)

TUTORIALS

[T1] **Differential Privacy for Strategic Information Sharing and Learning: Foundations, Mechanisms, and Applications**

Amin Rahimian, Juba Ziani, Marios Papachristou, Yuxin Liu

Conference on Web and Internet Economics (WINE), 2025

SOFTWARE

volesti

github.com/GeomScale/volesti

Open-source C++ statistical software for sampling and volume approximation from convex bodies.

OTHER
EXPERIENCE

GeomScale Open-source Organization

May 2020 – March 2020

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 & MENTORSHIP EXPERIENCE

- The Structure of Information Networks (PhD-level, Cornell) Spring & Fall 2023
- 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

MENTEES

- Yuxin Liu (Ph.D. student at the University of Pittsburgh)
- Jasmine Li (Undergraduate Cornell CS)
- Ioannis Iakovidis (Google Summer of Code 2022; now Ph.D. student at Johns Hopkins)
- Zhang Zhuyan (Google Summer of Code 2022; now Technology analyst at Bank of America)

TALKS & LECTURES [†]= scheduled ^{*}= presented by co-author

- **Resilience in Networks: Frameworks for Resource Allocation and Simulation**
 - Archimedes, Athena RC April 2025
 - 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**
 - Arizona State University, School of Mathematical and Natural Sciences, AI Seminar November 2025
 - INFORMS Annual Meeting October 2025
 - 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**
 - CMU, Tepper School of Business OM Seminar* September 2024
 - 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

DEPARTMENTAL
AND
PROFESSIONAL
SERVICE

Department and School Outreach

- Department of Information Systems Brown Bag Seminar Organizer [\[link\]](#)
- W. P. Carey School of Business, PhD Lunch and Learn, November 2025, Keynote Speaker [\[link\]](#)

Program Committee

- ACM Conference on Fairness Accountability and Transparency (FAccT)
- ACM Conference on Knowledge Discovery and Data Mining (KDD)
- IEEE International Conference on Trust, Privacy and Security in Intelligent Systems, and Applications (TPS)

Ad-hoc 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
- 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@virginia.edu)
School of Data Science, University of Virginia

LAST UPDATED

December 5, 2025