

CONTACT INFORMATION	E-mail	papachristoumarios@cs.cornell.edu
	GitHub	papachristoumarios
	Office	302 Gates Hall, Cornell University, 107 Hoy Rd
	Google Scholar	[profile]
	Twitter	@papachristoum
	Website	papachristoumarios.github.io
AREAS	Machine Learning, Data Mining, Algorithms, Social and Information Networks	
EDUCATION	Cornell University	2020 – exp. 2026
	Ph.D. Candidate in Computer Science (<i>GPA: 4.0/4.0</i>), Minor: <i>Applied Math</i>	
	– <i>Advisor</i> : Jon Kleinberg	
	– <i>Relevant Coursework</i> : Analysis of Algorithms, Information Networks, Numerical Methods for Data Science, Design of Online Marketplaces, ML Theory	
	M.S. in Computer Science, Minor: <i>Applied Math</i> (<i>GPA: 4.0/4.0</i>)	
	2020 – 2022	
	National Technical University of Athens	2015 – 2020
	Diploma in ECE (<i>GPA: 9.49/10.00</i>). Major: <i>Computer Science</i> .	
	– <i>Advisor</i> : Dimitris Fotakis	
PUBLICATIONS	1. Marios Papachristou , Amin Rahimian. “Cascading Failures, Power laws and Resiliency of Production Networks”. <i>Under review</i> . 2023.	
	2. Marios Papachristou , Sid Banerjee, Jon Kleinberg. “Dynamic Interventions for Networked Contagions”. <i>WWW 2023</i> . [preprint] [code] [poster]	
	3. Marios Papachristou , Rishab Goel, Frank Portman, Matt Miller, Rong Jin. “GLINKX: A Scalable Unified Framework for Homophilous and Heterophilous Graphs”. <i>NeurIPS workshop on Graph Learning Frontiers (GLFrontiers)</i> , 2022. [preprint] [poster] [workshop]	
	4. Marios Papachristou , Jon Kleinberg. “Core-periphery Models for Hypergraphs”. <i>KDD 2022</i> . [paper] [code] [data] [slides] [poster]	
	5. Marios Papachristou , Jon Kleinberg. “Allocating Stimulus Checks in Times of Crisis”. <i>WWW 2022</i> . [preprint] [code] [paper] [talk] [slides] [news]	
	6. Marios Papachristou . “Sublinear Domination and Core-periphery Networks”. <i>Scientific Reports (Nature)</i> , 2021. [paper] [code]	
	7. ^{$\alpha\beta$} Apostolos Chalkis, Vissarion Fisikopoulos, Marios Papachristou , Elias Tsigaridas. “Truncated Log-concave Sampling for Convex Bodies with Reflective Hamiltonian Monte Carlo”. <i>ACM Transactions on Mathematical Software (forthcoming)</i> , 2023. This paper incorporates and supersedes our previous preprint . [code]	
	8. Marios Papachristou , Dimitris Fotakis. “Stochastic Opinion Dynamics for User Interest Prediction in Online Social Networks”. <i>Preprint</i> , 2020. [preprint]	
	9. Marios Papachristou . “Software clusterings with vector semantics and the call graph”. <i>ESEC/FSE 2019</i> . [paper] [code] [data] (<i>ESEC/FSE Student Research Competition Finalist Paper</i>)	
	10. Vasilis Kostakis*, and Marios Papachristou* . “Commons-based peer production and digital fabrication: The case of a RepRap-based, Lego-built 3D printing-milling machine”. <i>Telematics and Informatics</i> , 2014. [paper]	

$\alpha\beta$ = alphabetical order, * = equal contribution

RESEARCH EXPERIENCE

Twitter Cortex *May 2022 – August 2022*
 – Research on *scalable machine learning on graphs*. Development of a simple scalable method for node classification in homophilous and heterophilous graphs. Paper and US patent submitted.

Cornell University *May 2021 – May 2022*
 – Graduate Research Assistant. Advisor: Jon Kleinberg.

GeomScale Organization *May 2020 –*
 – Part-time research on sampling from truncated log-concave densities, and convex optimization, working on the [volesti](#) open-source package.

Business Analytics Lab *2018 – 2020*
 – *Project: SADE*. Architecture recovery via call graphs, source code embeddings, and clustering methods.

Hellenic Center for Marine Research *June 2014 – August 2014*

P2P Lab (Remote Research Associate) *2013 – 2014*

OTHER EXPERIENCE

Google Summer of Code 2020 (GeomScale) *June 2020 – August 2020*
 – *Project: Sampling from high-dimensional truncated log-concave densities.*
[\[code\]](#) [\[talk1\]](#) [\[talk2\]](#)

Google Summer of Code 2018 (GFOSS-OTA) *April 2018–September 2018*
 – *Project: 3gm*. Automated codification of Greek Legislation.
[\[code\]](#) [\[data\]](#) [\[talk\]](#)

Ratle (Co-founder) *October 2017–October 2018*

TEACHING ASSISTANTSHIPS

– The Structure of Information Networks (PhD-level, Cornell) *Spring 2023*
 – Discrete Mathematics (NTUA) *Spring 2017*
 – Programming Techniques (NTUA) *Spring 2016*
 – Introduction to Computer Programming (NTUA) *Fall 2016, Fall 2017*

HONORS & AWARDS

– LinkedIn Ph.D. Fellowship (14.8% acceptance rate) *2022*
 – Gerondelis Scholarship *2022*
 – A.G. Leventis Scholarship (12.5% acceptance rate) *2022*
 – Chateaubriand Fellowship (*declined*) *2022*
 – Cornell Fellowship *2020*
 – Thomaidion Award *2019*
 – ESEC/FSE 2019 ACM Student Research Competition Finalist *2019*
 – 4th (out of 93) in International Space Engineering Competition (CanSat) *2019*
 – 2nd Award at the “*be finnovative 2.0 accelerator*” *2018*
 – 1st Award at “*Crowdhackathon Fintech #2*” *2017*
 – Top %1 worldwide in IEEEExtreme 11.0 Programming Competition *2017*
 – Touramanoglu Scholarship *2015*
 – “The Great Moment of Education” Scholarship *2015*

SERVICE

– *Program Committee*. [FAccT ‘22](#)
 – *Reviewer*. [KDD ‘23](#), [ECML-PKDD ‘23](#), [GLFrontiers@NeurIPS ‘22](#), [JOSS](#), [WHMD@NeurIPS ‘21](#), [OR Spectrum](#), [Machine Learning](#)
 – *Mentorship*: Google Summer of Code (2019–), Cornell Undergraduate AI Group (2022–), Student-applicant support program at Cornell CS (2022).