
MARIOS A. PAPACHRISTOU (Last Updated: May 13, 2022)

CONTACT INFORMATION E-mail papachristoumarios@cs.cornell.edu
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INTERESTS *Areas:* Social and Information Networks, Machine Learning, Data Mining, Algorithms
Focuses: Statistical Modeling of Networks, Financial Networks, Graph ML

EDUCATION **Cornell University** 2020 – exp. 2026
Ph.D. in Computer Science (*GPA: 4.0/4.0*), Minor: *Applied Math*
– *Advisor:* Jon Kleinberg, *Committee:* Jon Kleinberg, Emma Pierson, Sid Banerjee
– *Relevant Coursework:* Analysis of Algorithms, Information Networks, Numerical Methods for Data Science, Design of Online Marketplaces

M.S. in Computer Science, Minor: *Applied Math (GPA: 4.0/4.0)* 2020–2022

National Technical University of Athens 2015–2020
Diploma in ECE (*GPA: 9.49/10.00*). Major: *Computer Science*.
– *Thesis:* “Stochastic Opinion Dynamics for Interest Prediction in Online Social Networks”. *Advisor:* Dimitris Fotakis.

- PUBLICATIONS
1. **Papachristou, Marios**, Banerjee, Sid, and Kleinberg, Jon. “Dynamic Interventions for Networked Contagions”. 2022, *Under review*.
 2. **Papachristou, Marios**, and Kleinberg, Jon. “Core-periphery Models for Hypergraphs”. 2022, *Under review*.
 3. **Papachristou, Marios**, and Kleinberg, Jon. “Allocating Stimulus Checks in Times of Crisis”. 2021, *WWW 2022*.
[\[preprint\]](#) [\[code\]](#) [\[paper\]](#) [\[talk\]](#) [\[slides\]](#)
 4. **Papachristou, Marios** “Sublinear Domination and Core-periphery Networks”. 2021, *Scientific Reports (Nature)*.
[\[paper\]](#) [\[code\]](#)
 5. ^{$\alpha\beta$} Chalkis, Apostolos, Fisikopoulos Vissarion, **Papachristou, Marios**, and Tsigaridas, Elias. “Truncated Log-concave Sampling with Reflective Hamiltonian Monte Carlo”. 2021, *Preprint*.
[\[preprint\]](#) [\[code\]](#)
 6. **Papachristou, Marios**, and Fotakis, Dimitris. “Stochastic Opinion Dynamics for User Interest Prediction in Online Social Networks”. 2020, *Preprint*.
[\[preprint\]](#)
 7. **Papachristou, Marios**. “Software clusterings with vector semantics and the call graph”. ESEC/FSE 2019.
[\[paper\]](#) [\[code\]](#) [\[data\]](#)
 8. Kostakis, Vasilis, and **Papachristou, Marios**. “Commons-based peer production and digital fabrication: The case of a RepRap-based, Lego-built 3D printing-milling machine”. Telematics and Informatics, 2014.
[\[paper\]](#)

^{$\alpha\beta$} = alphabetical order, * = equal contribution

RESEARCH EXPERIENCE **Twitter Cortex (Research Internship)** May 2022 – August 2022
– Research on Graph ML on the UMR team.

Cornell University (Graduate Research Assistant) May 2021 –

GeomScale Organization May 2019 –

	<ul style="list-style-type: none"> – Part-time research on sampling from truncated log-concave densities, and convex optimization, working on the volesti open-source package. 	
	Business Analytics Lab (Undergraduate Researcher)	<i>2018 – 2020</i>
	<ul style="list-style-type: none"> – <i>Project: SADE.</i> Architecture recovery via call graphs, source code embeddings, and clustering methods. 	
	Hellenic Center for Marine Research	<i>June 2014 – August 2014</i>
	P2P Lab (Remote Research Associate)	<i>2013–2014</i>
PROFESSIONAL EXPERIENCE	Google Summer of Code 2020 (GeomScale)	<i>June 2020– August 2020</i>
	<ul style="list-style-type: none"> – <i>Project: Sampling from high-dimensional truncated log-concave densities.</i> [code] [talk1] [talk2] 	
	Google Summer of Code 2018 (GFOSS-OTA)	<i>April 2018–September 2018</i>
	<ul style="list-style-type: none"> – <i>Project: 3gm.</i> Automated codification of Greek Legislation. [code] [data] [talk] 	
	Ratle (Co-founder)	<i>October 2017–October 2018</i>
TEACHING	Undergraduate Teaching Assistant (NTUA)	
	<ul style="list-style-type: none"> – Discrete Mathematics (4th Semester) – Programming Techniques (2nd Semester) – Introduction to Computer Programming (1st Semester) 	<i>Spring 2017</i> <i>Spring 2016</i> <i>Fall 2016, Fall 2017</i>
HONORS & AWARDS	<ul style="list-style-type: none"> – Cornell New Student Fellowship (first-year). Cornell University. – Thomaidion Award. Publication during undergraduate studies (2019). NTUA. – Programming Competition <i>IEEEExtreme 12.0</i>. Ranked 48th out of 4,000 World-wide (top 1%), 1st in Greece, 13th in Europe (PComplete Team) – 4th (out of 93) Place in <i>International Space Engineering Competition at Texas</i> (CanSat) organized by NASA Goddard and the American Astronautical Society – 1st Award at “<i>Crowdhackathon Fintech #2</i>” for developing a cashierless system for retail shops to eliminate queues by National Bank of Greece – 2nd Award at the “<i>be finnovative 2.0 accelerator</i>” for developing a cashierless system for retail shops to eliminate queues by National Bank of Greece – ESEC/FSE 2019 ACM Student Research Competition Finalist – 2nd Place at the “<i>ECESCON9</i>” Hackathon – “<i>Touramanoglu</i>” Scholarship by Municipality of Helioupolis & Hymettus – “<i>The Great Moment of Education</i>” Scholarship by Eurobank EFG 	
ACADEMIC SERVICE	<ul style="list-style-type: none"> – <i>Program Committee.</i> FAccT ‘22 – <i>Reviewer.</i> JOSS, WHMD@NeurIPS ‘21, OR Spectrum – <i>Mentor.</i> Google Summer of Code Mentor <ul style="list-style-type: none"> ◦ GeomScale organization ◦ GFOSS-OTA 	<i>2021, 2022</i> <i>2019</i>