Maria Despoina Siampou

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Education

University of Southern California

Los Angeles, CA Ph.D. IN COMPUTER SCIENCE Aug. 2022 - Present

• Advisor: Cyrus Shahabi

National and Kapodistrian University of Athens Athens, Greece

Oct. 2020 - July 2022

Sep. 2016 - Sep. 2020

Aug. 2022 - Present

M.Sc. in Computer Science, gpa: 9.67/10 (honors)

• Thesis: Supervised Scheduling for Geospatial Interlinking

• Advisor: Manolis Koubarakis

National and Kapodistrian University of Athens Athens, Greece

B.Sc. in Computer Science, gpa: 8.5/10 (honors)

• Thesis: Extending YAGO4 with Geospatial Knowledge

• Advisor: Manolis Koubarakis

Employment _____

Google Research Mountain View, CA

STUDENT RESEARCHER May. 2025 - Aug. 2025

Hosts: Shushman Choudhury, Neha Arora

University of Southern California Los Angeles, CA

GRADUATE RESEARCH ASSISTANT, INFOLAB

• Research Focus: Geospatial Foundation models.

National and Kapodistrian University of Athens

Athens, Greece Mar. 2021 - Jul. 2022 RESEARCH ASSOCIATE, AI TEAM

• R&D Engineer at EU Funded Horizon 2020 Projects: Al4Copernicus and DeepCube.

• Research Focus: Optimization of geospatial interlinking pipelines with supervised methods.

Amazon Web Services Berlin, Germany Sep. 2020 - Feb. 2021

SOFTWARE DEVELOPMENT ENGINEER INTERN, REDSHIFT DATABASE

• Manager: Hinnerk Gildhoff

Publications ___

* denotes equal contribution

PREPRINTS

P1 A. Hajisafi, **M.D. Siampou**, B. Azarijoo and C. Shahabi. "WaveGNN: Modeling Irregular Multivariate Time Series for Accurate Predictions.", arXiv 2024.

PEER REVIEWED PUBLICATIONS

- C1 M.D. Siampou*, J. Li*, J. Krumm, C. Shahabi, and L. Hu. "Poly2Vec: Polymorphic Fourier-Based Encoding of Geospatial Objects for GeoAl Applications.", International Conference on Machine Learning (ICML), 2025.
- C2 M.D. Siampou, C. Anastasiou, J. Krumm and C. Shahabi. "TrajRoute: Rethinking Routing with a Simple Trajectory-Based Approach – Forget the Maps and Traffic!", IEEE International Conference of Mobile Data Management (MDM), 2025.
- C3 M. Papamichalopoulos, G. Papadakis, G. Mandilaras, M.D. Siampou, N. Mamoulis, and M. Koubarakis. "Three Dimensional Geospatial Interlinking with Jedai-Spatial." Journal of Web Semantics, 2024.
- C4 M.D. Siampou, L. Nocera, J. Oh, B. Smith, and C. Shahabi. "An Algorithmic Approach for Detecting Neuromotor Developmental Disabilities in Infants from Wearable Sensor Data." IEEE International Conference of Engineering in Medicine and Biology Society (EMBC), 2024.

LAST UPDATED: JUNE 22, 2025

- C5 A. Hajisafi, **M.D. Siampou**, J. Bi, L. Nocera, and C. Shahabi. "Wearables for Health (W4H) Toolkit for Acquisition, Storage, Analysis, and Visualization of Data from Various Wearable Devices." IEEE International Conference of Data Engineering (ICDE), Demo Track, 2024.
- C6 **M.D. Siampou**, G. Papadakis, N. Mamoulis, and M. Koubarakis. "Supervised Scheduling for Geospatial Interlinking." ACM International Conference on Advances in Geographic Information Systems (SIGSPATIAL), 2023.
- C7 A. Hajisafi, H. Lin, S. Shaham, H. Hu, **M.D. Siampou**, Y-Y. Chiang, and C. Shahabi. "Learning Dynamic Graphs from All Contextual Information for Accurate Point-of-Interest Visit Forecasting." ACM International Conference on Advances in Geographic Information Systems (SIGSPATIAL), 2023.
- C8 **M.D. Siampou**, N. Karalis, M. Koubarakis. "Extending YAGO4 Knowledge Graph with Geospatial Knowledge." International Workshop on Geospatial Linked Data (GeoLD) @ ESWC, 2022.

Selected Honors & Awards _

2025-26	Philomela Myronis Endowed Dissertation Fellowship	, Universit	y of Southern California
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- 2022-23 Annenberg Fellowship, University of Southern California
- 2017-20 Scholarship for Top Undergraduate Students, National Scholarship Foundation of Greece
 - 2016 Award for Outstanding Performance in Panhellenic Exams, HelleniQ Energy

Teaching_

University of Southern California

Los Angeles, CA 2024 - Present

HEAD TEACHING ASSISTANT

• CSCI 587: Geospatial Information Management (Fall 2024, Spring 2025)

National and Kapodistrian University of Athens

Athens, Greece

TEACHING ASSISTANT

• YS02: Artificial Intelligence (Fall 2020, Fall 2021)

- K08: Data Structures & Algorithms (Spring 2021, Spring 2022)
- K24: Systems Programming (Spring 2021)

2020 – 2022

National and Kapodistrian University of Athens

Athens, Greece 2018 – 2022

Undergraduate Teaching/Lab Assistant

- K08: Data Structures & Algorithms (Spring 2018, Spring 2019, Spring 2020)
- K10: Object Oriented Programming (Fall 2018)
- K07: Computer Architecture (Spring 2018)

Leadership, Service, & Extracurricular Activities _____

SERVICE AND OUTREACH

- 2022-Pr. USC Women in Engineering (WiSE) Mentorship Program, Graduate Student Mentor
 - 2024 USC Viterbi CURVE Program, Research Mentor to Undergraduate Students
 - 2024 USC Viterbi SHINE Program, Research Mentor to High School Students
 - 2024 ACM SIGSPATIAL, Student Volunteer
- 2023/24 IEEE ICDE, Student Volunteer
 - 2019 ACM Student Chapter University of Athens, Organizing Member

REVIEWER

IEEE International Conference of Data Engineering (ICDE), 2024

IEEE Transactions on Knowledge and Data Engineering (TKDE), 2024

ACM SIGKDD Conference on Knowledge Discovery and Data Mining (SIGKDD), 2025

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