

Maria Despoina Siampou

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Education

University of Southern California

PH.D. IN COMPUTER SCIENCE

- Advisor: Cyrus Shahabi

Los Angeles, CA

Aug. 2022 – Present

National and Kapodistrian University of Athens

M.SC. IN COMPUTER SCIENCE, GPA: 9.67/10

- Thesis: Supervised Scheduling for Geospatial Interlinking
- Advisor: Manolis Koubarakis

Athens, Greece

Oct. 2020 – July 2022

National and Kapodistrian University of Athens

B.SC. IN COMPUTER SCIENCE, GPA: 8.5/10

- Thesis: Extending YAGO4 with Geospatial Knowledge
- Advisor: Manolis Koubarakis

Athens, Greece

Sep. 2016 – Sep. 2020

Employment

University of Southern California

GRADUATE RESEARCH ASSISTANT, INFOLAB

- Research Focus: Geospatial Foundation models.

Los Angeles, CA

Aug. 2022 – Present

National and Kapodistrian University of Athens

RESEARCH ASSOCIATE, AI TEAM

- R&D Engineer at EU Funded Horizon 2020 Projects: AI4Copernicus and DeepCube.
- Research Focus: Optimization of geospatial interlinking pipelines with supervised methods.

Athens, Greece

Mar. 2021 – Jul. 2022

Amazon Web Services

SOFTWARE DEVELOPMENT ENGINEER INTERN, REDSHIFT DATABASE

- Manager: Hinnerk Gildhoff

Berlin, Germany

Sep. 2020 – Feb. 2021

Publications

* denotes equal contribution

PREPRINTS

- P1 **M.D. Siampou***, J. Li*, J. Krumm, C. Shahabi, and L. Hu. “Poly2Vec: Polymorphic Encoding of Geospatial Objects for Spatial Reasoning with Deep Neural Networks.”, arXiv 2024.
- P2 A. Hajisafi*, **M.D. Siampou***, B. Azarjoo* and C. Shahabi. “WaveGNN: Modeling Irregular Multivariate Time Series for Accurate Predictions.”, arXiv 2024.

PEER REVIEWED PUBLICATIONS

- C1 **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.
- C2 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.
- C3 **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.
- C4 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.

- C5 **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.
- C6 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.
- C7 **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

- 2024-25 **Philomela Myronis Endowed Dissertation Fellowship**, University of Southern California
- 2022-23 **Graduate School Full-Year 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

TEACHING ASSISTANT

2024 – Present

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

National and Kapodistrian University of Athens

Athens, Greece

TEACHING ASSISTANT

2020 – 2022

- YS02: Artificial Intelligence (Fall 2020, Fall 2021)
- K08: Data Structures & Algorithms (Spring 2021, Spring 2022)
- K24: Systems Programming (Spring 2021)

National and Kapodistrian University of Athens

Athens, Greece

UNDERGRADUATE TEACHING/LAB ASSISTANT

2018 – 2022

- 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