

213-649-8322
Los Angeles, CA
siampou@usc.edu

Maria Despoina Siampou

Blog: [msiampou](#)
GitHub: [msiampou](#)
LinkedIn: [msiampou](#)

EDUCATION

University of Southern California

Ph.D. in Computer Science

Advisor: Prof. [Cyrus Shahabi](#)

Los Angeles, United States

Aug 2022 – Present

National and Kapodistrian University of Athens

M.Sc. in Computer Science, GPA: 9.67/10.00

Advisor: Prof. [Manolis Koubarakis](#)

Athens, Greece

Oct 2020 – Jul 2022

National and Kapodistrian University of Athens

B.Sc. in Computer Science, GPA: 8.50/10.00

Advisor: Prof. [Manolis Koubarakis](#)

Athens, Greece

Oct 2016 – Sept 2020

WORK EXPERIENCE

University of Southern California

Graduate Research Assistant

Los Angeles, United States

Aug 2022 – Present

- **Learned-based storage for Geo-Multivariate Time Series.** Currently building a learned-based storage to support approximate spatio-temporal range queries on time series data.

National and Kapodistrian University of Athens

Graduate Research Assistant

Athens, Greece

Mar 2021 – Jul 2022

- **Supervised Progressive Geospatial Interlinking.** Proposed a supervised learning algorithm that models geometries (polygons, linestrings) to feature vectors and computes the probability of two geometries to be topologically related. Incorporated the algorithm into the state-of-the-art Geospatial Interlinking pipeline and achieved competitive results. Delivered a serial implementation in *Java* and a distributed one in *Scala* and *Apache Spark*.

Amazon Web Services – Redshift Database

Software Development Engineer Intern

Berlin, Germany

Sept 2020 – Feb 2021

- **Introducing ST_ClusterKmeans in Redshift Database.** Added support for spatial window functions in Redshift's architecture. Delivered an end-to-end implementation of ST_ClusterKmeans window function for any type of 2D and 3D geometries. The code was delivered in *C++*.

PUBLICATIONS

Siampou, M.D., Papadakis, G., Mamoulis, N., & Koubarakis, M. (2022). *Supervised Scheduling for Geospatial Interlinking*. In preparation.

Papamichalopoulos, M., Papadakis, G., Mandilaras, G., **Siampou, M.D.**, Mamoulis, N., & Koubarakis, M. (2022). *Three-dimensional Geospatial Interlinking with JedAI-spatial*. arXiv preprint arXiv:2205.01905.

Siampou, M.D., Karalis, N. & Koubarakis, M. (2022). *Extending YAGO4 Knowledge Graph with Geospatial Knowledge*. GeoLD 2022@ESWC.

HONORS & AWARDS

- Graduate Fellowship – USC Viterbi School of Engineering 2022
- Tuition Waiver for Top Applicants – National and Kapodistrian University of Athens 2021
- Scholarship for Top Undergraduates – Greek State Scholarships Foundation 2017, 2018, 2020
- Panhellenic Examination, Award of Excellence – Hellenic Petroleum Industry 2016

TEACHING EXPERIENCE

- Artificial Intelligence – National and Kapodistrian University of Athens Fall 2020, 2021
- Data Structures & Algorithms – National and Kapodistrian University of Athens Spring 2021, 2022
- Systems Programming – National and Kapodistrian University of Athens Spring 2021

SKILLS

Languages	C++, C, Python, Java, Scala, Bash & C Shell
Programming Paradigms	Procedural, Object Oriented, Logic, Functional
Database Languages	SQL, DDL, DML
Database Systems	PostgreSQL, MySQL
Operating Systems	Windows, Linux
Other	Git, Spark