George Christodoulou

in George Christodoulou | ∰ giorgoschristodoulou.github.io | ≥ g.c.christodoulou@tudelft.nl

Education

Ph.D. in Database Systems

Mar 2020 - Sep 2023

University of Ioannina

University of Ioannina

Ioannina, Greece

Topic: "Interval Data Management in Main Memory"

Supervisor: Nikolaos Mamoulis

M.Sc. in Software Engineering

Sep 2018 - Feb 2020

Ioannina, Greece

Thesis: "A Prefix-based Hybrid Solution for Main Memory Indexing"

Supervisor: Nikolaos Mamoulis

GPA: 9.1/10

Diploma (M.Eng.) in Computer Science & Engineering

Sep 2011 - Sep 2017

Ioannina, Greece

University of Ioannina

Supervisor: Evangelos Papapetrou

GPA: 6.74/10

Thesis: "Routing Methods with Machine Learning on Delay Tolerant Networks."

Experience

Postdoctoral Researcher

Oct 2023 - Present

Delft University of Technology

Delft, Netherlands

• Working on stream processing and serverless computing.

Research Assistant

May 2019 - Sep 2019

Research & Technology Hellas (CERTH)

Thessaloniki, Greece

- o worked on designing and developing an Anomaly detector based on machine learning techniques for the "Secure and Safe IoT (SerIoT)" project.
- used Python, PyTorch, Tensorflow.

Software engineer Intern

Jul 2016 – Aug 2016

Natech S.A.

Ioannina, Greece

- worked on designing and developing a ASP.NET MVC web application.
- o used C, MVC

Research Program Scholar

May 2020 - Jul 2023

Organization of Special Account of Research Funds, University of Ioannina

Ioannina, Greece

- Smart City Bus Project (IoT Platform for Transportation)
- ProximIoT Project (IoT Platform for Proximity Marketing)

Internships

Research Intern

Feb 2022 - Apr 2022

Mainz, Germany

University of Mainz (JGU) working with Prof. Panagiotis Bouros.

Research Intern Jan 2023 - Feb 2023

Hong Kong University of Science and Technology (HKUST) working with Prof. Dimitris Papadias.

Hong Kong

Teaching

University of Ioannina

Sep 2017 - July 2023

Department of Computer Science and Engineering

Ioannina, Greece

- o Fall 2017, 2018, 2019: Networks lab assistant.
- o Spring 2018: Java lab assistant.
- $\circ\,$ Fall 2020,2021,2022: Python lab assistant.

Student Supervision

Master Theses Supervision

Giorgos Kotsinas, Querying intervals (working title), Master thesis, Department of Computer Science and Engineering,
 UoI

Bachelor Theses Supervision

- Jan Raider, A user interface for visualizing interval indexing (working title), Bachelor thesis, Insitute of Computer Science, JGU
- Vasileios Georgoulas, Bachelor thesis, A web application for passenger movement with public transport, Department
 of Computer Science and Engineering, UoI
- Danae Tsaousi, Bachelor thesis, Visualization and analysis of public transport data, Department of Computer Science and Engineering, UoI
- Penelope Eleftheriadi, Bachelor thesis, Visualization and analysis of public transport data, Department of Computer Science and Engineering, UoI
- Filippos-Apostolos Papachristou, Bachelor thesis, Implementation and evaluation of a main memory temporal index, Department of Computer Science and Engineering, UoI

Publications

International Journals

 $\circ\,$ HINT: A Hierarchical Interval Index for Allen Relationships

G. Christodoulou, P. Bouros, N. Mamoulis.

International Journal on Very Large Databases (VLDBJ) 2023.

International Conferences

o HINT: A Hierarchical Index for Intervals in Main Memory

G. Christodoulou, P. Bouros, N. Mamoulis.

ACM International Conference on Management of Data (SIGMOD) 2022.

- o SmartCityBus A Platform for Smart Transportation Systems.
 - G. Bouloukakis, C. Zeginis, N. Papadakis, K. Magoutis, G. Christodoulou,
 - C. Kosyfaki, K. Lampropoulos, N. Mamoulis, P. Bouros, N. Mamoulis.

ACM International Conference on Web Search and Data Mining (WDSM) 2023 (abstract).

- LIT: Lightning-fast In-memory Temporal Indexing
 - G. Christodoulou, P. Bouros, N. Mamoulis.

ACM International Conference on Management of Data (SIGMOD) 2024.

International Workshops

o Efficient And Scalable Management Of Interval Data

G. Christodoulou

International Conference on Extending Database Technology PhD Workshop (EDBT PhD Workshop) 2023.

Service

Reviewer for PKADD 2021, ICDE 2024 External Reviewer for ICDE 2019-2023, VLDB 2020-2024, SIGMOD 2020, EDBT 2020, DASFAA 2023

Technical Skills

Programming Languages: C/C++ (intermediate), Java (intermediate), Python (intermediate). Other Skills: Complex data management, Complex data indexing, Machine learning techniques, Tensorflow, PyTorch, ASP.NET MVC

Languages

Greek (native speaker), Dutch (native speaker), English (B2 Degree).