Emmanouil (Manos) Chatzakis

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Education

Université Paris Cité — Paris, France
PhD Computer Science — May 2025 – Fall 2028 (expected)
Thesis: Declarative Recall for Vector Search, supervised by Prof. Themis Palpanas.

EPFL — Lausanne, Switzerland
MSc Computer Science. GPA 5.50/6.00. — Sept. 2022 – Apr. 2025

University of Crete — Heraklion, Greece
BSc Computer Science. GPA 9.43/10.00 (First-of-Class honors). — Sept. 2018 – July 2022

Professional Experience

Google — Sunnyvale, CA, USA
Student Researcher, Systems Research Group & AlloyDB — May 2025 – Dec. 2025
- Worked on declarative recall for filtered nearest neighbor vector search (C, C++).
- Implemented several declarative recall ideas into Google database products (C, C++, PostgreSQL).

French Alternative Energies and Atomic Energy Commission (CEA) — Paris, France
Research Intern — Mar. 2024 – Aug. 2024
- Developed a scalable subsequence data series similarity search tool applicable to large seismic data collections (C, C++).
- Compared current state-of-the-art methods for subsequence similarity search (C, C++).
- Processed and analyzed vast seismic data collections (Python, ObsPy).

EPFL DIAS Laboratory — Lausanne, Switzerland
Research Intern — July 2022 – Sept. 2022
- Created an enhanced semantically rich join operator applicable to vector embeddings, offering more than 100x speedup compared to naive vector joins (C, C++).
- Evaluated various algorithms for string similarity joins (C, C++).

ICS-FORTH — Heraklion, Greece
Research Intern — Sept. 2019 – Sept. 2021
- Developed a tool for similarity-based browsing, operating on top of RDF knowledge graph embeddings (Java, SPARQL, JavaScript, HTML/CSS).
- Created a tool for digital preservation of historical monuments by harvesting metadata and storing them as SIPs (using METS and BagIt formats).

Publications

Peer-reviewed conference and journal publications:

1. **Manos Chatzakis**, Duo Lu, Helena Caminal, Yannis Chronis, Fatma Özcan, Yannis Papakonstantinou, Timofey Asyrkin, Sebastian I. Murguia, Itai Rosenblatt, Themis Palpanas. VADER: Filtered Vector Search with Declarative Recall, PVLDB 2027.
2. **Manos Chatzakis**, Themis Palpanas. The Early Termination Senate for Approximate Vector Search, IEEE Data Engineering Bulletin 2026.
3. Zeyu Wang, **Manos Chatzakis**, Qitong Wang, Themis Palpanas, Peng Wang, Wei Wang. ANNiE: A Learned Query Cost Estimator for Graph-Based Approximate Nearest Neighbor Search, PVLDB 2026.
4. Francesca Del Gaudio, **Manos Chatzakis**, Gayathiri Ravendirane, Botao Peng, Themis Palpanas. DaiSy: A Library for Scalable Data Series Similarity Search, SIGMOD Record 2026.

5. Duo Lu, Helena Caminal, **Manos Chatzakis**, Yannis Papakonstantinou, Yannis Chronis, Vaibhav Jain, Fatma Özcan. An In-Depth Study of Filter-Agnostic Vector Search on a PostgreSQL Database System, ACM SIGMOD 2026.
6. **Manos Chatzakis**, Yannis Papakonstantinou, Themis Palpanas. DARTH: Declarative Recall through Early Termination for Approximate Nearest Neighbor Search, ACM SIGMOD 2026.
7. Viktor Sanca, **Manos Chatzakis**, Anastasia Ailamaki. Optimizing Context-Enhanced Relational Joins, IEEE ICDE 2024.
8. **Manos Chatzakis**, Panagiota Fatourou, Eleftherios Kosmas, Themis Palpanas, Botao Peng. Odyssey: A Journey in the Land of Distributed Data Series Similarity Search, PVLDB 2023.
9. **Manos Chatzakis**, Michalis Mountantonakis, Yannis Tzitzikas. RDFsim: Similarity-Based Browsing over DBpedia using Embeddings, Information MDPI, Data and Metadata Management with Semantic Technologies, 2021.
10. Yannis Tzitzikas, Maria Papadaki, **Manos Chatzakis**. A Spiral-like Method to Place in the Space (and Interact with) too Many Values, JIIS 2021.

Tutorials accepted in international conferences:
1. **Manos Chatzakis**, Francesca Del Gaudio, Sophia Sideri, Themis Palpanas. The Quest for Faster ANN Vector Search, EDBT 2026.

Awards

PhD Scholarship July 2025
Onassis Public Benefit Foundation
Distinguished scholarship awarded to 80 Greek students from various disciplines to support their doctoral studies.

Graduate MSc Scholarship July 2023
Onassis Public Benefit Foundation
Distinguished scholarship awarded to 60 Greek students to support their postgraduate studies.

Graduate MSc Scholarship July 2022
John S. Latsis Public Benefit Foundation
Distinguished scholarship awarded to 20 Greek students to support their postgraduate studies at international institutions.

Elisavet Keramintzoy Award July 2022
University of Crete
Award granted to the top-of-the-class student graduating from the University of Crete.

Distinguished Stelios Orfanoudakis Scholarship Sept. 2019, 2020, 2021
ICS-FORTH
Distinguished yearly scholarship awarded to the top-of-the-class computer science students of the University of Crete.

Teaching

Université Paris Cité Paris, France
Data Science (Graduate course, 60 students) *Spring 2026*
Role: Main Teaching Assistant (TA), responsible for weekly lecturing, supervision and grading.
Topics: Regression, Classification, Clustering, Collaborative Filtering, Data Preprocessing, Frequent Itemsets

University of Crete Heraklion, Greece
Object-Oriented Programming (Undergraduate course, 200 students) *Fall 2021*
Role: Undergraduate Teaching Assistant (TA), responsible for lecturing, supervision and grading.
Topics: Programming Basics, Object-Oriented Notions, Java 8 Lambdas

Professional Service

Serving as a regular reviewer for SIGMOD 2028 (Research Track), VLDB 2027 (Research Track), VLDB 2026 (Demo Track, Shadow PC).

Students Supervised

1. Viktoria Katsamani (co-supervised with Prof. Themis Palpanas and Prof. Panagiota Fatourou), BSc student, University of Crete, Sept. 2026 – May 2027.
2. Ignacio Montoro Pineiro (co-supervised with Francesca Del Gaudio and Prof. Themis Palpanas), BSc student, Yale University, May 2026 – July 2026.
3. Gayathiri Ravendirane (co-supervised with Prof. Themis Palpanas), BSc student, Université Paris-Saclay, May 2025 – July 2025.

Invited Talks & Visits

1. Invited talk at DATUM, Ohio State University, Columbus, OH, USA, November 2026. Host: Prof. John Paparrizos.
2. Invited talk at ETIS, CY Cergy Université, Cergy, France, October 2026. Host: Prof. Katerina Tzompanaki.
3. Invited talk at Systems Group at ETH, Zurich, Switzerland, October 2025. Host: Prof. Yannis Chronis.
4. Invited visit at Sky Lab of UC Berkeley, Berkeley, CA, USA, August 2025. Host: Prof. Matei Zaharia.
5. Invited talk at Oracle Corporation, Redwood City, CA, USA, August 2025. Host: Dr. Viktor Sanca.

References are available upon request. Updated: November 2026