Mohammad Hashemi

Office: 301 Dowman Dr, Atlanta, Georgia 30322

□ (+1) 310 678 6303 | 🎢 Homepage | 💟 Email | 🖸 Github | 🛅 Linkedin | 📂 Google Scholar

Education

Ph.D. in Computer Science

Emory University

DEPARTMENT OF COMPUTER SCIENCE AND INFORMATICS

Aug. 2023 - Present

• Cumulative GPA: 3.95/4

B.Sc. in Computer Engineering

Shahid Beheshti University

FACULTY OF COMPUTER SCIENCE AND ENGINEERING

Sep. 2018 - Feb. 2023

Cumulative GPA: 3.85/4

Research Interests

Machine Learning | Spatio-temporal Computing | Graph Data Mining | Computer Vision

Publications _____

Scalable Graph Condensation with Evolving Capabilities [pdf]

KDD 2026

THE THIRTY-SECOND CONFERENCE ON KNOWLEDGE DISCOVERY AND DATA MINING

• S Gong*, **M Hashemi***, J Ni, C Yang, W Jin (* Equal Contribution)

From Points to Places: Towards Human Mobility-Driven Spatiotemporal Foundation Models via Understanding Places [pdf]

SIGSPATIAL 2025

THE THIRTY-THIRD CONFERENCE ON ADVANCES IN GEOGRAPHIC INFORMATION SYSTEMS

• M Hashemi, A Zufle

PlaceFM: A Training-free Geospatial Foundation Model of Places using Large-Scale Point of Interest Data [pdf][code]

arXiv 2025

arXiv

• M Hashemi, H Amiri, A Zufle

A Comprehensive Survey on Graph Reduction: Sparsification, Coarsening, and Condensation [pdf][slides][paper list]

IJCAI 2024

INTERNATIONAL JOINT CONFERENCE ON ARTIFICIAL INTELLIGENCE

• M Hashemi, S Gong, J Ni, W Fan, B. A Prakash, W Jin

Automated Cardiac Coverage Assessment in Cardiovascular Magnetic Resonance Imaging using a Recurrent 3D Dual-Domain Convolutional Network [pdf][code]

Medical Physics

MEDICAL PHYSICS

• S Nabavi, **M Hashemi**, M Ebrahimi Moghaddam, AA Abin, AF Frangi

Machine learning technique in the north zagros earthquake prediction [pdf]

Applied Computing & Geoscience

Applied Computing and Geosciences

• S Ommi, M Hashemi

A Type-2 Neuro-Fuzzy System with a Novel Learning Method for Parkinson's Disease Diagnosis [pdf]

APIN

APPLIED INTELLIGENCE

• A Salimi-Badr, M Hashemi, H Saffari

A Neural-Based Approach to Aid Early Parkinson's Disease Diagnosis [pdf][code]

IKT 2020

2020 11TH INTERNATIONAL CONFERENCE ON INFORMATION AND KNOWLEDGE TECHNOLOGY (IKT)

• A Salimi-Badr, M Hashemi

Honors & Awards

2025	M.Sc. in Computer Science at Emory University, [certification]	USA
2023	1st Place , Best B.Sc. thesis project	Iran
2020	4th Place, out of 131 undergraduate students studying Computer Engineering	Iran
2017	Passing the first stage, of Mathematics Olympiad for two years	Iran

Experience

RESEARCH EXPERIENCE

Graduate Research Assistant Emory University

SAPATIAL COMPUTING LAB Mar 2025 - Present

- · Developing novel foundation models for understanding human mobility through geolocation data.
- Under supervision of Prof. Andreas Zufle.

Graduate Research Assistant Emory University

AIMSIAR

Sep. 2024 - Apr. 2025

- Developing privacy-preserving predictive models for multi-modal temporal Electronic Health Record (EHR) data
- Rotation project under supervision of Prof. Li Xiong.

Graduate Research Assistant Emory University

MELODY LAB Aug. 2023 - Aug. 2024

- Proposing novel scalable and explainable **Graph Condensation** methods for Graph Neural Networks.
- Rotation project under supervision of **Dr. Wei Jin**.

B.Sc. Thesis Shahid Beheshti University

IMAGE PROCESSING & DISTRIBUTED SYSTEMS LAB

Sep. 2022 - Feb. 2023

- Proposing a novel Deformable Image Registration(DIR) for 4D CT lung images. [code]
- Under supervision of Prof. Mohsen Ebrahimi Moghaddam.

Research Assistant Shahid Beheshti University

IMAGE PROCESSING & DISTRIBUTED SYSTEMS LAB

Feb. 2021 - Mar 2022

- Proposing and Implementing a novel interpretable framework for Automatic Assessment of Full Left Ventricular Coverage in Cardiac Cine Magnetic Resonance Imaging with 3D CNNs equipped with explainable machine learning methods.
- Under supervision of Prof. Mohsen Ebrahimi Moghaddam.

Research Assistant Shahid Beheshti University

ROIAA (ROBOTICS & INTELLIGENT AUTONOMOUS AGENTS) LAB

Oct. 2020 - Jun. 2021

- Proposing various Recurrent Neural Networks (RNNs) such as LSTMs, and GRU for sequence learning to have early detection of Parkinson's Disease.
- In another research project, an interpretable classifier using an interval type-2 fuzzy neural network (IT2FCNN) for detecting patients suffering from Parkinson's Disease was proposed.
- · Under supervision of Dr. Armin Salimi-Badr

WORK EXPERIENCES

Machine Learning Mentor Tehran, Iran

RAHNEMA COLLEGE CO.

Jan. 2022 - Mar 2022

 Assisting several interns in carrying out a project in the field of Reinforcement Learning (RL). The project aimed to propose a recommender system based on batch Reinforcement Learning algorithms.

Machine Learning Intern Tehran, Iran

RAHNEMA COLLEGE CO.

May. 2021 - Jul. 2021

- Developing a web application powered by the ability to perform Web Crawler Detection using unsupervised algorithms for the Sanjagh Co. website which is one of the biggest e-commerce platform in Iran. [code]
- · Under supervision of Dr. Seyed Ali Osia, Dr. Mahmood Karimian, and Yasin Orouskhani.

Services

CONFERENCE EXTERNAL REVIEWER

- The Conference on Advances in Geographic Information Systems, (SIGSPATIAL) 2025
- **International Conference on Pattern Recognition**, (ICPR) 2024
- **AAAI Conference on Artificial Intelligence**, (AAAI) 2024
- 2024 The International Conference on Learning Representations, (ICLR)

VOLUNTEERING

Web Chair @ WWW'24 Workshop in Data-centric Artificial Intelligence [website], DCAI 2024