Amir Eskandari Khordebolagh

■ (613)-770-4596 | 💌 amir.eskandari@queensu.ca | 🖸 AmEskandari | 🛅 ameskandari | 💆 Amireskndri

Education

Oueen's University Kinaston, Canada

PHD IN SCHOOL OF COMPUTING - BAM LAB

Sept. 2023 -

Average: 4.3/4.3

• Supervisor: Dr. Farhana Zulkernine

Amirkabir University of Technology (AUT) - (Tehran Polytechnic)

Tehran, IRAN

M.Sc. in Electrical Engineering (Communication Systems)

Sept. 2020 - Mar. 2023

• Average : 17.97/20 via 26 credits (Ranked 2^{th})

• Thesis: "Reconstruction of Missing Data of Environmental Sensors with Graph Neural Networks" (19.25/20) (excellent)

• Supervisor: Dr. Vahid Pourahmadi

Imam Khomeini International University (IKIU)

Qazvin, IRAN

July 2016 - Aug. 2020

B.Sc. in Electrical Engineering (Control Systems)

Average: 17.79/20 via 143 credits (Ranked 2th)

• Thesis: "Designing PID Controllers By Deep Reinforcement Learning" (19.25/20) (excellent)

• Supervisor: Dr. Mehdi Rahmani

Research Interests

- Graph Machine Learning
- Knowledge Representation and Retrieval
- Large Language Models and AI Reasoning

Publication

"SDA-GRIN for Adaptive Spatial-Temporal Multivariate Time Series Imputation", A.Eskandari, A.Aanad,

Submitted (ICASSP) D.Sharma, F.Zulkernine

"Self-Supervised Keypoint Detection with Distilled Depth Keypoint Representation", A.Aanad, E.Rashno,

Submitted (ICASSP) A.Eskandari, F.Zulkernine

"Survey: Transformer-based Models in Multimodal Data Processing", E.Rashno, A.Eskandari, A.Aanad, Submitted (ACM

F.Zulkernine Survey)

GN2DI: A Scalable Graph Neural Network Framework for Spatial Missing Data Imputation in Sensor."

Networks", A.Eskandari, S.Jamshidiha, V.Pourahmadi

Experience

IFFF FMI DS

Connected Minds CFREF Kingston, Canada

PhD Trainee

Exploring the development of a Chatbot Assistant specifically designed for the elderly population.

School of Computing, Queen's University

Kingston, Canada

May. 2024 - Present

Sep. 2023 - Present

• Focus on ChatBot communication and Dialog systems.

· Working on the alignment of LLMs and Knowledge Graphs for knowledge retrieval.

iThermAl Herent, Belgium/Remote

AI ENGINEER, COMPUTER VISION ENGINEER

RESEARCH AND TEACHING ASSISTANT

Jan. 2023 - Aug. 2023 • Research on Vision Based Algorithm for Fire and Smoke Detection, such as YOLOv5.

MLops and Devops

University of New South Wales Sydney (UNSW), School of Biomedical Eng.

Kensington, Australia / Remote

Aug. 2022 - Jan. 2023

RESEARCH INTERNSHIP

• Working on applying Graph Neural Networks on Bioinformatics tasks.

Working on developing a method for gene-disease prioritization.

Amirkabir University of Technology (AUT) - (Tehran Polytechnic)

Tehran, IRAN

RESEARCH ASSISTANT Apr. 2021 - Present

- Dedicated Research on Deep Learning in particular Graph Neural Networks.
- Working on applying Graph Neural Networks on Multivariate Time Series tasks.
- Modeling Missing values challenges of IoT Sensor Networks as Spatial-Temporal problems.
- Focused Study on Graph Neural Networks both in theories and applications.

Teaching Experience

CISC 101 - Introduction to Programming

Kingston, Ontario

TEACHER ASSISTANT (TA) IN QUEEN'S

Fall, 2024

Instructor: Dr. Wendy Powley
CISC 839 - Data Analytics

Kingston, Ontario

TEACHER ASSISTANT (TA) IN QUEEN'S

Winter, 2024

• Instructor: Dr. Hazem Abbas

Digital Systems I

Qazvin, IRAN

TEACHER ASSISTANT (TA) IN IKIU

Spring Semester, 2020

• Instructor: Dr. Seyed Ali Hosseini

Selected Academic Courses

W, 2023	Statistical Learning II, A+	Queen's
F, 2023	Deep Learning, A+	Queen's
F, 2023	Reinforcement Learning, A+	Queen's
F, 2023	Automatic Planning, A+	Queen's
SP, 2021	Machine Learning, 20/20	EE Dept. AUT
F, 2021	Data Mining, 20/20	CS Dept. AUT
F, 2021	Statistical Learning Theory, 19.4/20	EE Dept. AUT

Technical Skills_

2024

Programming Python, C/C++, R, Matlab, LaTeX, MySQL, Linux Shell Script, Docker, CI/CD, HTML

Libraries PyTorch, Tensorflow, Numpy, Pandas, Scikit-Learn, Pytorch Lightening, Pytorch Geometric

Tools Version Controlling (GIT), GitHub, VIM, Jupyter Notebook, VS Code, MS Words

Program Committees

Judge, CUCAI 2024 - Canadian Undergraduate Conference on AI 2024 power by Connected Minds

Kingston, Ontario