Amirhossein Rajabpour

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Research interests

Artificial Intelligence, Deep Learning, Time Series Analysis, Vision

Education

University of Alberta Edmonton, Alberta, Canada
M.Sc. of Computing Science 2023 – Expected 2025

Amirkabir University of Technology (Tehran Polytechnic) Tehran, Iran
B.Sc. of Computer Engineering 2018 – 2023
Major in Artificial Intelligence, Minor in Computer Networks
- *cGPA: 17.32 (3.69/4)*
- *GPA (last two years): 18.75 (3.96/4)*

Technical Skills

Programming Languages: Python, C, Java, Kotlin, Octave
OS: Windows, Linux (Ubuntu)
Artificial Intelligence: Tensorflow, Pytorch, Keras, Scikit learn, Fastai
Database Systems: MySQL, PostgreSQL
Web Development: Django, Flask, HTML, CSS
Miscellaneous: OpenCV, Docker, Jira, Git, LaTex, Numpy, Pandas, Plotly, Selenium, Xampp, Wireshark, GNS3, Arduino, Verilog, VHDL

Research and work Experiences

Bachelors Thesis | Amirkabir University | Mar 2023 – May 2023
Face aging platform using generative models e.g. CycleGAN and reversible models. Supervised by Mohammad Rahmati.

Research Assistant | Amirkabir University | Feb 2022 – Jun 2022
Supervised by Hamed Farbeh. Working on portfolio asset allocation using reinforcement learning and graph neural networks. I was responsible for implementing a graph convolutional network from a time series dataset.

Machine Learning Engineer | R&D Department of Crouse PJS Co. | Oct 2021 – Jan 2022
Working on an AI Vision problem. My job was to design a light model using classical ML algorithms to find malfunctioning LEDs with the following steps:
- Localizing LEDs on the monitor
- Clustering LEDs light pixels and using the more valuable clusters for extracting light information with fuzzy C-means clustering
- Extracting luminance and wavelength from those selected clusters
- Use different regression models for different LED colors to detect malfunctioning LEDs

DevOps Engineer Intern | **Graph Co.** | **Nov 2020 – Apr 2021**
Working with Docker, Minikube, and some backend technologies

Teaching Experiences

Teaching Assistant | **Principles of Artificial Intelligence** | **Fall 2022**
• Under the supervision of Mahdi Javanmardi
• Designing (and grading) projects about Constrained Satisfaction Problems, adversarial search, Bayes Nets, and Reinforcement Learning

Teaching Assistant | **Cloud Computing** | **Fall 2022**
• Under the supervision of S.Ahmad Javadi
• Designing (and grading) practical assignments about using APIs, working with cloud services, and working with Docker and Kubernetes

Teaching Assistant | **Internet of Things** | **Fall 2022**
• Under the supervision of Siavash Khorsandi
• Designing (and grading) assignments about various scenarios for working with different sensors and actuators and programming with Arduino

Teaching Assistant | **Algorithm Design** | **Spring 2022 & Fall 2021 & Spring 2021**
• Under the supervision of Alireza Bagheri, Sajad Shirali-Shahreza
• Defining and grading assignments
• Taking quizzes

Honors and Awards

Master's Admissions: Fully funded admission to UofA CS, ECE and Radiology & Diagnostic Imaging programs and University of Western Ontario CS program 2023

Bachelor's Scholarship: Awarded a 4-year scholarship from Amirkabir University of Technology 2019-2023

University Entrance Exam: Achieved top 1% place among more than 140,000 applicants of the Nationwide Mathematics University Entrance Exam 2018

Language Skills

Persian: Native
English: TOEFL iBT: 109 (R: 26, L: 28, S: 26, W: 29)
German: Professional Working Proficiency (B2)

References

Available upon request

**To review my projects and certificates, check my Homepage.*