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: 17.25 (3.68/4)

• GPA (last two years): 18.69 (3.95/4)

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 Radiol ogy & 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.