Parham Mohammad Panahi

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780-937-1410
Edmonton Alberta Canada

Education

2022 – Present **University of Alberta** – Edmonton, Canada
M.Sc. in Computing Science (GPA: 4.0/4.0)
Advisor: Adam White
Research Topic: Reinforcement Learning

2016 – 2021 **Azad University** – Tehran, Iran
B.Sc. in Computer Science (GPA: 3.93/4.0)
Advisor: Mohammad Ali Fariborzi Araghi

Publications

2023 **A New View on Planning: Goal Space Planning**
*Kevin Roice, ***Parham M. Panahi**, Scott Jordan, Adam White, Martha White.
In preparation.

Experience

Sept 2022 – Present **Graduate Student** University of Alberta
I work on **Reinforcement Learning**; a machine learning paradigm for sequential decision making and control. My current research is focused on speeding up learning by addressing the temporal and structural **Credit Assignment** problem through:
1. Agents that construct temporally extended **Models** of their world;
2. Agents that store and **Remember Past Experience** as part of the learning process.

Sept 2023 – Present **AI Career Accelerator Program Participant** Amii
Contributed through 100 hours+ of work-integrated learning and collaboration with Adam White and Alona Fyshe and amii's training team to create AI Everywhere, an introductory AI course for all students at University of Alberta.

Sept 2022 – Apr 2023 **Teaching Assistant** University of Alberta
Course: CMPUT 175 - Introduction to the Foundations of Computation II
Conducted Labs to assist and test students, Marked Labs and Assignments, helped students during Office Hours.

Nov 2021 – July 2022 **Content Creator** Caspian Net Pars
Designed and Produced Online Courses on Programming and Machine Learning.

Dec 2020 – Sep 2021 **Research Assistant** Azad University
Implemented a Deep Learning Audio/Visual Speech Recognition system for Farsi.

Sept 2018 – Apr 2019 **Teaching Assistant** Azad University
Course: Introductory and Advanced Programming
Conducted Labs and gave supplementary lectures on Programming Paradigms.

Selected Course Projects

Fall 2022 **Average Reward Methods in Continuing Control**
Empirical study of differential Q-learning on continuing Catch and Pendulum tasks.
Instructor: Adam White • Project Report

Fall 2022 **Novel Content Generation with Machine Learning**
Controlling generation of blended content via genetic algorithm and VQ-VAEs.
Instructor: Matthew Guzdial • Project Report

Honors and Scholarships

2023 University of Alberta FGSR Graduate Travel Award 2023 - 2024

2023 Admitted to the DLRL2023 Summer School Organized by CIFAR/MILA

2022 University of Alberta Graduate Recruitment Scholarship FALL 2022/23

2021 Rank 25 in National Mathematical Olympiad for University Students in Iran

Other Skills

Programming Languages: Python, Julia, C++, and many Machine Learning and Scientific Computing Packages, including Torch, TensorFlow, and Jax.

Languages: English (IELTS band 8), Farsi (native).