# 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: 18.71/20.0)

Mentors: Mohammad Ali Fariborzi Araghi, Amin Mahmoodi.

#### **Research Interests**

Temporally Abstract Models in RL · Sample Efficiency in Deep RL

## Honors and Scholarships

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
2021	Rank 26 in National Graduate School Entrance Exam in Mathematics in Iran

## Research Experience

May 2023 - Sample Efficiency in Deep Reinforcement Learning

present Collaborators: Andrew Patterson, Adam White, Martha White

Topic: Experience Replay

Jan 2023 - Model Based Reinforcement Learning

present Collaborators: Kevin Roice, Scott Jordan, Adam White, Martha White

Topic: Planning with Option Models

#### Dec 2020 - Sep Audio-Visual Speech Recognition

2021 Collaborator: Shahed Mohammadi

Gathered and processed video data for visual speech recognition. Implemented a Lip Reading System for Farsi using STCNNs and LSTMs.

### **Teaching Experience**

## Fall 2022 - Teaching Assistant, CMPUT 175: Introduction to the Foundations of Com-

Winter 2023 **putation II (University of Alberta)** 

Conducted Labs to Assist and Test Students, Assignment Marking, Lab Marking, and Helping Students during Office Hours.

#### Fall 2018 - Teaching Assistant, Python Programming (Azad University)

Winter 2019 Conducted Labs and gave Supplementary Lectures.

### **Industry Experience**

#### Nov 2021 - July Caspian Net Pars (Designer and Producer) Tehran, Iran

Designed and Taught Online Courses on the Topics of Programming and Reinforcement Learning.

## 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

#### 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).