Arya Ebrahimi

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Research Interests

Continual Reinforcement Learning, Embodied AI

I am currently interested in developing a fine-tuning approach for Vision-Language-Action (VLA) models using reinforcement learning for long-horizon tasks.

Education

Master of Science in Computer Engineering

University of Alberta, Edmonton, Canada   2025 – Present

Supervisor: Prof. Your Supervisor Name

GPA: 4.0/4.0

Bachelor of Science Computer Engineering

Ferdowsi University of Mashhad, Mashhad, Iran   2019 – 2024

Thesis: Investigating Representations and Auxiliary Tasks in Deep Reinforcement Learning

GPA: 3.8/4.0

Publications

Conference Proceedings

[1] **A. Ebrahimi** and J. Jin. "Retrospective and Structurally Informed Exploration via Cross-task Successor Feature Similarity". In: *The Exploration in AI Today Workshop at ICML*. 2025.

[2] **A. Ebrahimi**, S. Ghavvampuor, M. Z. Neyshaburi, and M. H. Y. Moghaddam. "A Contrastive NILM Approach for Appliance Detection". In: *2023 7th International Conference on Internet of Things and Applications (IoT)*. IEEE. 2023, pp. 1–5.

Research Experience

Graduate Research Assistant

University of Alberta, Edmonton, Canada   2025 – Present

- Developed an intrinsic reward signal based on cross-task successor features similarity to promote informative exploration in contrast of novelty exploration.

Teaching Experience

Graduate Teaching Assistant

University of Alberta, Edmonton, Canada   Winter 2026

- **ENCMP 100** – **Computer Programming for Engineers**

Awards and Honors

Graduate Research Assistant Fellowship, University of Alberta   2025

Skills

Programming: Python, C/C++, MATLAB, Java, PyTorch, TensorFlow, JAX

Robotics: ROS/ROS2, Franka Emika Panda

Tools: Linux, Git, Docker, LaTeX

Service and Outreach

Voluntary Activities

- Volunteer, Dean's Research Award, University of Alberta 2025
- President, Scientific Society of Computer Engineering Students, Ferdowsi University of Mashhad 2023
- Member, Scientific Society of Computer Engineering Students, Ferdowsi University of Mashhad 2022