PARSA RAHBARI

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[LinkedIn](#)   [GitHub](#)   [Medium](#)

SUMMARY

Research Assistant focused on scientific ML, RL, and numerical methods;

EDUCATION

Amirkabir University of Technology (Tehran Polytechnic)   *Sep 2022 – Jun 2026*
BSc in Computer Science   **GPA: 3.82**

RESEARCH INTERESTS

Reinforcement Learning, Deep Learning, Scientific Machine Learning, Numerical Analysis

RESEARCH EXPERIENCE

Mindlab-AUT   Sep 2024 – Present
Research Assistant   *Tehran, Iran*

· Applied neural networks to solve differential equations for modeling biological systems.

EXPERIENCE

Teaching Assistant   Feb 2025 – Present
· **Deep Learning** – Dr. Fatemeh Shakeri
· **Numerical Analysis** – Dr. Mostafa Shamsi

PUBLICATIONS

Modeling Cellular Invasion with DeepONets – Learning growth and diffusion parameters (under review)
Supervised by Prof. Abbaszadeh

Accelerating Diffusion Models – Improving diffusion model inference for sample-inefficient tasks like RL (ongoing)
In collaboration with Prof. Rohban, Sharif University of Technology

SELECTED PROJECTS

Q-Learning Macro-Actions: Improved FrozenLake-v1 agent with action chunking. [Repo]

Manifold Learning: Isomap and PCA/t-SNE on MNIST/Iran map. [Repo]

PageRank: Implemented with power iteration and eigendecomposition. [Repo]

Map Coloring CSP: Used MRV/LCV and AC-3 for CSP heuristics. [Repo]

Pacman: Built with custom AI for ghost logic. [Repo]

SELECTED COURSES

Deep Learning (Audited)	Deep RL (Audited)
AI (20/20)	Data Structures (20/20)
Advanced Programming (20/20)	Linear Optimization (19/20)
Data Mining (18.39/20)	Computational Geometry (18/20)

CERTIFICATIONS

Advanced Learning Algorithms	Unsupervised Learning + RL
Supervised Machine Learning	

SKILLS

Programming: Python, C++, PyTorch, JAX   **Languages:** English (Fluent), Persian (Native)