

Pooyan Rahmanzadehgervi

+1 (334) 471-0660 | pooyan.rmz@gmail.com | <https://www.linkedin.com/in/pooyan-rahmanzadehgervi-a29a73211/>

Birth Date: 24 Aug. 1994 | Nationality: Iran | Current Residence: USA

EDUCATION

Auburn University (AU) <i>Ph.D. in Computer Science and Software Engineering</i>	Auburn, AL <i>Aug. 2022 – Present</i>
Ferdowsi University of Mashhad (FUM) <i>Master of Science in Artificial Intelligence and Robotics</i> <i>Thesis: Autonomous Quadrotor Navigation using End-to-End Deep Reinforcement Learning</i>	Mashhad, Khorasan Razavi <i>Sep. 2017 – Sep. 2021</i>
Ferdowsi University of Mashhad (FUM) <i>Bachelor of Science in Computer Software Engineering</i> <i>Thesis: Training a Two-layer Feed-Forward Perceptron to Obtain a Reliable Initialization for RBF Networks</i>	Mashhad, Khorasan Razavi <i>Sep. 2012 – Sep. 2017</i>
National Organization for Development of Exceptional Talents (Sampad) <i>High school Diploma in Mathematics</i>	Babol, Mazandaran <i>Sep. 2008 – Sep. 2012</i>

RESEARCH INTERESTS

- *Deep Reinforcement Learning*
- *Robotics and Autonomous Robots*
- *Explainable AI*
- *Functional Analysis*

SKILLS

Research: Reinforcement Learning, Deep Learning, Deep Reinforcement Learning, Robotics and Control, Optimization and Mathematics, Computer Vision

Programming: Python, C++, Java, MATLAB

Library and Technical Toolbox: Pytorch, Tensorflow, Keras, Anaconda, Scikit-Learn, Pandas, Pygame, Matplotlib, NumPy, Sympy, Scipy

Simulator and Engine: OpenAI-Gym, Robotics Operating System, Gazebo, Mujoco, Unity

Job Related: Teamwork, Documentation, Fast Learner, Time Management

Software and Productivity: Git, LaTeX, Office, Adobe Photoshop, Adobe Premiere

LANGUAGE

English

TOEFL IBT score: 105/120

Reading: 28, Listening: 29, Speaking: 25, Writing: 23

Exp. Date: 25 Sep. 2023

Persian

Native

PUBLICATION

- **Vision-Based Obstacle Avoidance in Drone Navigation using Deep Reinforcement Learning**
 - *11th International Conference on Computer Knowledge Engineering (ICCKE 2021)*
 - *28-29 Oct. 2021 Ferdowsi University of Mashhad, Iran*
 - *Indexed by IEEE*
 - *Best paper award*

EXPERIENCE

Teaching Assistant

Aug. 2022 – Present

Auburn University (AU)

Auburn, AL

- **Machine Learning**

- *Jan. 2023 – Present*
- **Course Syllabus:** *Perceptrons, Bayes, Logistic Regression, Linear Regression, SVMs, Kernels, Classification and Regression Trees, Ensemble Models, PCA*
- Grading the assignments, Providing assistance to students with both theoretical and practical assignments

- **Intro to Computer Science II**

- *Aug. 2022 – Dec. 2022*
- **Course Syllabus:** *Java programming language*
- Grading the assignments, Providing assistance to students with both theoretical and practical assignments

Machine Learning Engineer

Sep. 2021 – April 2022

Polaris LTD.

Mashhad, Khorasan Razavi

- As an ML Engineer and Data Scientist, I developed novel data visualization methods for financial markets. I was also a lead researcher in the company.

Teaching Assistant

Jan. 2014 – Sep. 2021

Ferdowsi University of Mashhad (FUM)

Mashhad, Khorasan Razavi

- **Electrical Circuits**

- *Jan. 2014 – Dec. 2016*
- **Course Syllabus:** *Circuit Analysis, RL and RC Circuits, RLC Circuits, Sinusoidal Steady-State Analysis, Magnetically Coupled Circuits*
- Providing assignments to the class, Instructing TA sessions

- **Advanced Artificial Intelligence**

- *Sep. 2018 – Jan. 2019*
- **Course Syllabus:** *Classical Planning, Bayesian Networks, Decision Theory, Motion Planning, and Discretizing*
- Providing both theoretical and programming assignments to the class, Instructing practical sessions

- **Fundamentals of Robotics**

- *Jan. 2019 – July 2019*
- **Course Syllabus:** *Transformations, Manipulator Kinematics, Singularity and Trajectory Generation, Mobile Robot Locomotion, Mobile Robot Kinematics, and Sensors*
- Providing both theoretical and programming assignments to the class

- **Advanced Topics in Artificial Intelligence**

- *Jan. 2020 – July 2021*
- **Course Syllabus:** *Introduction to RL, Markov Decision Process, Value-Based RL, Policy-Based RL, Actor-Critic, Model-Based RL, Games, and Classic Problems, Introduction to DRL, Policy Optimization, Deep Q-Networks, Value Prediction, Actor-Critic Architecture, Imitation Learning, Inverse RL*
- Guest lecturer, Providing both theoretical and programming assignments to the class, Instructing practical sessions

Internship

June 2015 – Sep 2015

Telecommunication Company of Babol

Babol, Mazandaran

- **Database Expert:** I provided technical support for managing assets and properties using MySQL.

ACTIVITIES

- **Conference Reviewer**

- *9th International Conference on Computer Knowledge Engineering (ICCKE 2019), Mashhad, Iran. (Indexed by IEEE)*
- *13th International Conference on Computer Knowledge Engineering (ICCKE 2023), Mashhad, Iran. (Indexed by IEEE)*

- **Freelance Programmer**

- *Implementing multiple Machine Learning projects such as Lossless Bayes Estimator, Traffic Light Scheduler, etc.*
- *Developing Inventory Management Application, Data Visualization Schemes, etc.*

- **SSCES Member**

- *Former member of the "Scientific Society of Computer Engineering Students" at Ferdowsi University of Mashhad, Iran.*

AWARDS

- AU Charles Gavin Research Fellowship: Awarded on May 2022.
- Qualified in the first stage of the national Olympiad of Physics among High school students.