CONTACT

IMAN SHARIFI

iman.sharifi.edu@gmail.com

+989196430541

Iran, Tehran

https://www.linkedin.com/in/iman-sharifi-ab3746246/

OBJECTIVE

As an energetic and diligent graduate, I am seeking a once-in-a-lifetime opportunity to prove and improve my academic abilities. I am a self-motivated person who is highly interested in applied mathematics and control theory; robotics and automation; machine learning; as well as computer vision.

EDUCATION

2019 - 2021

Master of Science, Mechanical Engineering
School of Mechanical Engineering, College of Engineering, Sharif University of Technology
GPA: 18.62/20

2015 - 2019

Bachelor of Science, Aerospace Engineering
School of Aerospace Engineering, College of Engineering, K. N. Toosi University of Technology
GPA: 15.28/20

2011 - 2015

Diploma of Education, Mathematics and Physics
Shahid Sani Government Model School
GPA: 19.43/20

EXPERIENCE

Nov. 2022 - Present

Graduate Research Assistant
Surrey University, School of Electrical Engineering
Research Area: Neuro-Symbolic Reinforcement Learning using Inductive Logic Programming
+Remote AI Research Assistant

2019 - 2022

Graduate Research Assistant
Sharif University of Technology, School of Mechanical Engineering
Research area: Application of neural-network-based reinforcement learning in robotics, especially quadcopter
Supervisor: Prof. A. Alasty

2022 - 2022

Graduate Teaching Assistant, Fuzzy control
Sharif University of Technology, School of Mechanical Engineering
Under the supervision of Prof. A. Alasty

2019 - 2020

Graduate Teaching Assistant, Advanced Mathematics
Sharif University of Technology, School of Mechanical Engineering
Under the supervision of Dr. Alireza Taheri

2019 - 2020

Undergraduate Teaching Assistant, Automatic Control
Sharif University of Technology, School of Mechanical Engineering
Under the supervision of Prof. H. Salarieh

2017 - 2019

Undergraduate Research Assistant
K. N. Toosi University of Technology, School of Aerospace Engineering
Research area: Dynamic and Control of robots, particularly Mobile Robots
Supervisor: Dr. A. B. Novinzadeh

2017 - 2018

Undergraduate Teaching Assistant, Differential Equations
K. N. Toosi University of Technology, School of Aerospace Engineering
Under the supervision of Dr. M. Jafari Nodoshan

2020 - 2021

SONEX (Sharif Ultrasonic Company)
Research and Design (R & D)
+ Research and Design Non-destructive Testing (NDT) Transducers
+ Teamwork experience

SKILLS

Machine Learning: RL, SK-learn, Keras, PyTorch, Google Colab, CNN, RNN

Symbolic Programming: Inductive Logic Programming (ILP) using Prolog, Aleph, Metagol

Computer Vision: OpenCV, CNN

Dynamics and Control: MATLAB, SIMULINK, ROS

Programming: C, Python, Prolog, Java

Computer-Aided Design: Solidworks, CATIA

Mechatronics: Arduino, PLC

Writing Essay: LaTeX, Microsoft Office

Web Design: HTML, CSS

ACHIEVEMENTS & AWARDS

Top Bachelor Thesis of Iranian Aerospace Association

Among the first 0.1% accepted students in the Master Entrance Exam of Mechanical Engineering among about 15000 people

Selected student for Ahmadi Roshan project of the National Elite Foundation of Iran

Among the first 3% accepted students in the Iranians Nationwide Entrance Exam of Mathematics and Physics among about 200,000 participants

COURSES

Nonlinear Control, 19.7/20

Advanced Mathematics, 19.4/20

Computer Vision, 19.2/20

Automatic Control, 19.0/20

Advanced Dynamics, 18.5/20

Advanced Control, 18.2/20

Fuzzy Control, 18.1/20

Control Systems Design, 17.0/20

Machine Learning, Artificial intelligence, Deep Learning (Audited)

Reinforcemet Learning and Adaptive Control (Audited)

Model Predictive Control (MPC) and Optimal Control

Flight Dynamics and Control

Guidance and Navigation

PROJECTS

Design Self-Tuning PID Control via a Hybrid Neural Structure based on Reinforcement Learning for Quadcopter Attitude and Altitude Control

Master's Thesis
Supervisor: Prof. A. Alasty

Trajectory Tracking of Tiltrotor using Fuzzy Sliding Mode Control with Fuzzy Modeling of Dynamic

Fuzzy Control, under the supervision of Prof. Aria Alasty

Quadcopter Trajectory Tracking using Adaptive Nonlinear Algorithms (LQR, Sliding Mode, Backstepping, Feedback Linearization, Model Reference Adaptive Control)

Nonlinear Control, under the supervision of Prof. Aria Alasty

Digits Classifications and Localization via Convolutional Neural Networks (CNN) and Face Detection using Histogram of Oriented Gradients (HOG) Algorithm

Computer Vision, under the supervision of Dr. Hoda Mohammadzadeh

Video Synopsis in a Video File Recorded by a Surveillance Camera

Computer Vision, under the supervision of Dr. Hoda Mohammadzadeh

Simulation of a 3-DOF Manipulator on Satellite Body using Newtonian, Lagrangian, and Quaternion Method

Advanced Dynamics, under the supervision of Dr. Hossein Nejat

Modeling, Simulation, Design, and Fabrication of Two-Wheel Mobile Balanced Robot (2WMBR)

Bachelor's Thesis
Under the supervision of Dr. Alireza B. Novinzadeh

PUBLICATIONS

Design Self-Tuning PID Control via a Hybrid Neural Structure based on Actor-Critic Method for Quadcopter Attitude and Altitude Control

I. Sharifi, A. Alasty
30th Annual International Conference of Iranian Society of Mechanical Engineers (ISME 2022), May 25-26, Tehran, Iran.

Self-Tuning PID Control using Multi-Agent Deep Reinforcement Learning for Trajectory Tracking of Quadcopter

I. Sharifi, A. Alasty
(In preparation)

INTERESTS

Machine Learning, Neuro-Symbolic Reinforcement Learning

Computer Vision

Applied Mathematics and Control Theory

Robotics and Automation

LANGUAGES

English, Fluent

Official TOEFL iBT certificate, Overall score: 96/120. Reading: 25/30, Listening: 24/30, Speaking: 23/30, Writing: 24/30

REFERENCE

Aria Alasti - "Sharif University of Technology"
Full Professor
aalasti@sharif.edu

Hassan Salarieh - "Sharif University of Technology"
Full Professor
salarieh@sharif.edu

Alireza Taheri - "Sharif University of Technology"
Assistant Professor
artaheri@sharif.edu

Alireza B. S. Novinzadeh - "K. N. Toosi University of Technology"
Associate Professor
Novinzade@email.kntu.ac.ir

Mahdi Jafari Nodooshan - "K. N. Toosi University of Technology"
Assistant Professor
Jafari@email.kntu.ac.ir

ADDITIONAL INFORMATION

Github:

https://github.com/98210184