MAHTA AKHYANI

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WEBSITE, PORTFOLIO, SOCIAL

- https://mahtaakhyani.github.io/
- https://www.linkedin.com/in/mahta-akhyani-0341721b7/
- https://github.com/mahtaakhyani/

EDUCATION

Expected in 09/2023	**Bachelor of Science**: **Chemical Engineering** **University of Tehran** - Iran B.Sc. thesis: The role of SLAM robots in pipe inspection in chemical and petroleum industries
06/2018	**High school Diploma**: **Mathematics And Physics** **Manzoumeh Kherad Institute** - Iran

RESEARCH EXPERIENCE

06/2022 to Current — **Advanced Robotics and Intelligent Systems Lab**

Department of Computer and Electrical Engineering, University of Tehran

Supervisor: **Dr. Hadi Moradi**

https://www.researchgate.net/lab/Advanced-Robotics-and-Intelligent-Systems-Hadi-Moradi

Project Title: **Social Robot for eliciting empathy to help children with ASD**

- Designing and Developing web user interface (**ROS** web tools, HTML, CSS, JS, Django REST)
- Designing and implementing facial expressions: Android Development (Python) - Adobe Character Animator - Adobe Illustrator - OpenCV
- Integrating **ROS**, Django, and Kivy, to create a uniform code base in Python to utilize the system for further developments and accommodation of possible applications.

03/2019 to 02/2020 — **Pharmacology Lab**

Department of Chemical Engineering, University of Tehran

Supervisor: **Dr. Reza Zarghami**

https://www.researchgate.net/lab/Reza-Zarghami-Lab

Project Title: **Chem-E-Car Competition**

Designing and constructing a car powered by a chemical energy source.

- Research and Synthesis of a new form of Zinc-Air battery
- Designing Brake System based on "Ammonia fountain"

RESEARCH INTERESTS

- Human-Robot Interaction (HRI)
- Social and Cognitive Robotics
- Cognitive Science
- Children with special needs

EXPERIENCE

Spring 2022

Teaching Assistant
Advanced Robotics (Graduate)
Department of computer and electrical engineering, University of Tehran,
Tehran, Iran

- Guided and tortured students requiring additional help in **ROS**-related topics, improving overall success in coursework.
- Provided assistance with the preparation of student's **SLAM** project.

Winter 2021

Teaching Assistant
Learning Python with Computer Vision approach
RoboTech Academy   *https://robotech-academy.com/*

- Plan and implement weekly quizzes following the academy's curriculum and objectives.
- Checked assignments, tests, and provided grades according to the academy's standards.
- Tutored struggling students individually or in the group to reinforce learning concepts.
- Advanced knowledge of field continuously through additional study to best help the professor and the students.

10/2021 to 07/2022

Freelanced Project
Simulation, and Construction of a ROS-based SLAM Robot

- Design, configuration, and application of the robotic system using **ROS**
- Simulation of the robot **SLAM** functionality in Gazebo
- Build and test the robot in real-time

04/2020 to 02/2021

Co-founder and CTO of Fanjoo
A Platform for Affordable Exchange of Knowledge

Fanjoo was initiated by Mahta Akhyani and Parsa Mashayekh. Our work was motivated by filling the gap between our national educational and industrial system by developing a platform for empowering people with mandatory skills not taught in the public educational system.

- Accomplishments: Launching Fanjoo website, Social media content creating, Discussing Fanjoo with university professors.
  Skills achieved:
  - Effective Collaboration

- Team Leadership
- Project Management
- Schedualing and Task Management
- Self Disciplinary

Technical Team: Mahta Akhyani (Head), Soudabe Hashemi, Hossein Heydari. Product management: Sara Shoarinejad (Head), Mina Sabouri, Parsa Mashayekh.

Unfortunatly due to some issues, Fanjoo was called off.

10/2019 to 01/2020 **Django Backend Developer**

UTech Academy - Tehran, Iran   *https://utech-academy.ir/*
- Worked independently to design and develop code
- Integrated Java-based web service such as REST into database management project using Python.

TECHNICAL SKILLS

- Python
- ROS
- Gazebo
- SolidWorks
- Git
- Kivy Framework

- Django REST Framework
- HTML, CSS, JS
- Adobe Character Animator
- Adobe Illustrator (Junior)
- Familiar with: OpenCV, Tensorflow, Deep learning basics, SLAM basics.

CERTIFICATIONS AND EXTRA COURSES

Spring 2021   **Fundamentals of Mechatronics**

Department of electrical and computer engineering, University of Tehran , Iran
- **Project Grade: 120/80 - Overall: 19.5/20**
- Lecturer: **Dr. Mehdi Tale Masouleh**

Winter 2020   **Deep Learning and Computer Vision**

RoboTech Academy   *https://robotech-academy.com/*
- **Not graded**

Summer 2019   **Back-End Developing with Django**

UTech Academy   *https://utech-academy.ir/*
- **Grade: 100/100**

Summer 2018   **Programming with Python**

Tehran Institute of Technology   *https://mftplus.com/*
- **Grade: 95/100**

LANGUAGES

Persian	**English**	**Arabic**
Native (C2)	Advanced (C1)	Elementary (A2)

HONOURS AND AWARDS

Summer 2018	**IUEE top 1%** Ranked 1064th among about 144000 participants in the Iranian University Entrance Exam (IUEE) for B.Sc.
Spring 2017	**Best Provincial Project, 18th Khwarazmi Scientific Competition Youth Awards, Tehran** Project Title: "Designing Different Types of Electrical Compass".
Winter 2015	**School Science Fair Winning Project In The Chemistry Category** Project Title: "Biological wastewater treatment for heavy metals removal with algae".

VOLUNTEER EXPERIENCE

05/2019 to 07/2019	• **Self-Directed Volunteer Teacher** Teaching Python fundamentals during summer to interested chemical engineering students.