Faraz Atarodi

f.atarodi.contact@gmail.com | https://farazatarodi.com | +32 492 839028
https://github.com/farazatarodi | https://www.linkedin.com/in/faraz-atarodi/

Education

Master of Science Technology in Electromechanical Engineering   **2019 – 2022**
KU Leuven, Leuven, Belgium

Bachelor of Science in Mechatronics Engineering   **2013 – 2018**
Sharif University of Technology, Tehran, Iran

Summary of Qualifications

- More than 4 years of full-time job experience in various technology fields.
- More than 7 years of extensive programming activities using at least 7 languages, resulting in a deep knowledge of both practical and theoretical subjects.
- Successfully completed more than 15 engineering and programming projects in different categories such as full-stack engineering, automation, machine learning, computer vision, network scripts, game design, robotics, mechanics, and electronics.
- Research and experience in modern libraries and frameworks for Python and JavaScript such as OpenCV, Requests, Numpy, Matplotlib, Motioneye, React, deck.gl, React Router, Three.js, and Redux.
- 1 year of management and leadership experience in a high output professional environment.

Professional Experience

Siemens On-site Ultrasound Engineer   **2018 – 2019**
Fanavari Azmayeshgahi Ltd., Tehran, Iran

- Successfully completed 3 months of training in Siemens Healthineers Ultrasound Department
- Continued in the company for the next 9 months as the youngest engineer in the company until my resignation.
- Visited and delivered more than 50 successful projects in 15 different cities in Iran.
- Attained teamwork behavior and critical thinking through many group projects alongside my valued colleagues.

Python Developer   **2016 – 2017**
Omran Souleh Co., Tehran, Iran

- Recruited and lead a 4 people team of developers in one of the largest steel manufacturers in Iran.
- Designed and constructed the company's internal network infrastructure between three office locations.
- Developed an automation web application for office tasks using JavaScript, Python, and SQL
- Developed an automation script, linking Tekla software and Excel to the company database using Python, VBA, and SQL enhancing the workflow.

Full Stack Engineer   **2014 – 2017**
Omran Souleh Co., Tehran, Iran   2016

- Designed and implemented a bilingual website for the company with social networking capabilities.
- Created projects database and linked it to the website, making it fully automated.
- Introduced social network marketing strategies and implemented them by using IFTTT alongside popular social networks such as LinkedIn, Facebook, and Instagram.

Hamrahan Atebba Co., Tehran, Iran   2014 – 2016

- Designed and created a bilingual e-commerce shop.
- developed company-specific software for managing stock.

IT Manager   **2013 – 2016**
Hamrahan Atebba Co., Tehran, Iran

- Designed and constructed a 20 user network.
- Provided full purchase and usage guidance.
- Managed the network and the servers.

Academic Projects

Robotic Dismantling of Small Electronic Devices (WIP)   **2021 – 2022**
KU Leuven, Leuven, Belgium

- My master's thesis is researching the optimal path-finding algorithm between screws on a device.
- Detecting screws based on machine learning and computer vision.
- Writing a program to automatically operate a robotic screwdriver head based on the data.
- Making the program as efficient as possible.

Disk Sorting Machine   **2019**
KU Leuven, Leuven, Belgium

- Designed a full mechanical disk sorting machine based on thickness that is primarily used in pharmaceutical factories as quality control for pills.
- Modeled and simulated the machine using SolidWorks and Enterprise Dynamics.

Vehicle Autopilot Solutions   **2017 – 2018**
Sharif University of Technology, Tehran, Iran

- My bachelor's thesis studied and designed the mechanical and electrical systems needed to convert an ordinary vehicle into an autonomous vehicle.

Integration of Computer Vision into Virtual Assistants   **2016**
Sharif University of Technology, Tehran, Iran

- Developed an algorithm to detect "scenarios" using cameras and OpenCV.
- Configured a digital assistant to use those "scenarios" and give assistance based on them using OpenAI.
- Completed the project by running the code on a Raspberry Pi which acted as a server.

Object Detection Software   **2015**
Sharif University of Technology, Tehran, Iran

- Created a script using Python and OpenCV to recognize QR codes.
- Used the script in the control system of a drone as an object and goal detection algorithm.

Single-board Computers   2014 – 2015

Sharif University of Technology, Tehran, Iran

- Carried research on replacement of embedded control boards with off-the-shelf boards such as Raspberry Pi, Arduinos, and Asus Tinker Board.

Self-Balancing Robot   2013 – 2014

Sharif University of Technology, Tehran, Iran

- Developed and built a prototype of a self-balancing robot using Python, C, and Arduino code on platforms such as Raspberry Pi and Arduino alongside a variety of components and sensors.

Volunteer and Extra-Curricular

Full Stack Engineer   2020 – 2021

Minecraft Farm Wiki

- Designed and created a gaming blog.

Personal Website

- Designed and created two versions of my personal website using React and its libraries.

Iran Interactive Population Map

- Gathered, formatted, and sorted Iran's (my home country) population data from the statistical center of Iran using Excel and Python
- Created a coordinates database using Python, Requests, and OpenStreetMap.
- Used the converted JSON data and created an interactive map using React, deck.gl, and Mapbox.

Teacher's Assistant at SUT   2014 – 2015

Logical Circuits Design

- Taught extra classes as an assistant for students to help them with their questions and problems for one semester

Industrial Design using Computers

- Coached 3D CAD modeling projects in exercise sessions using SolidWorks and AutoCAD for one semester

Certifications and Skills

Languages

- Persian: Native
- English: IELTS 7.5
- Dutch: Beginner (Taking classes)

Programming languages

- Python: since 2014 (Certificate from Google)
- JavaScript: since 2014
- HTML, PHP, CSS: since 2014

- Java: 6 years
- C/C++: 3 years
- C#: 2 years
- VBA: 1 year

3D modeling

- AutoCAD: 3 years
- SolidWorks: 5 years
- Blender: 1 year

Microsoft Office Suite

- Word, Excel, PowerPoint: since 2011

Creative Programs

- Adobe Photoshop and Illustrator: since 2012 (Hobby)
- Premiere, Final Cut Pro: 3 years (Hobby)
- Procreate: since 2019 (Hobby)
- Unity: since 2018 (Hobby)

Extra

- "Export Management" certification from Industrial Management Institute of Iran