

## Highlights

- 15 years of experience in Robotics, Electronics and C# Developer
- More than 10 patents and Awards.
- Expertise in ROS, Artificial Intelligence, Computer Vision, and machine learning
- Intelligent and Automation systems
- Experience in software development and algorithm programming.

## Background and summary

As a robotic engineer with a strong background in Electronic Engineering and IoT device development, I possess a unique blend of technical expertise and innovation. With a master's degree in Electronic Engineering and experience in developing cutting-edge AI, I am well-equipped to design, build, and implement advanced robotic systems that meet the needs of modern businesses. My technical expertise includes proficiency in programming languages such as C#, Python, and C, as well as experience with ROS (Robot Operating System) and other key robotic software platforms, I also have experience in Artificial Intelligence and embedded Boards, in addition, I possess strong analytical and problem-solving skills that enable me to quickly identify issues and develop effective solutions.

## Education

### 2012 – 2014 Master of Science in Electronics Engineering

- Hakim Sabzevari University, Sabzevar, Iran
- Thesis: Design a flexible capacitive tactile sensor

### 2003– 2008 Bachelor of Science in Electronics Engineering

- Azad University, Sabzevar, Iran
- Thesis: design a robot to help the persons with a disability in movement

## Publications

Click [here](#) to see all the publications in google scholar

- Khezri, H., Farzaneh, M., Ghasemishahrestani, Z. and Moghadam, A.P., 2021. ANN-based diagnosis method for skin cancers using dermoscopic images. Highlights in BioScience, 4.
- Khezri, H. and Farzaneh, M., Diagnose the Size of Left Atrial Appendage for Watchman Device.
- Farzaneh, M., Fatahi, M., & Azimfar, S. Flexible Capacitive Sensors based on paper sheets.
- Haddadnia, J., Farzaneh, M., & Nejad, A. P. (2013). Accelerate the Face Detection Optimization with Edge Detection and the Discrete Cosine Transform (DCT). International Journal of Computer Applications, 82(2).
- Fatahi, M., & Farzaneh, M. (2015, November). Smart way to verify the identity of the sound, based on neural network technique identification by voice. In 2015 2nd International Conference on Knowledge-Based Engineering and Innovation (KBEI) (pp. 345-347). IEEE.
- Khezri, H., & Farzaneh, M. Diagnose the Size of Left Atrial Appendage for Watchman Device.

## Trainings and Skills

- |                                       |                                         |
|---------------------------------------|-----------------------------------------|
| ✓ C++, C#, Python, Pascal, MATLAB     | ✓ SOLID                                 |
| ✓ Robotics                            | ✓ Design of digital and analog circuits |
| ✓ Embedded Boards (Raspberry Pi, ARM) | ✓ Artificial Intelligence               |
| ✓ ROS (Robot Operating System)        | ✓ Automation Systems                    |
| ✓ RPA (Robotic Process Automation)    | ✓ Smart Home                            |

## Certificates and Awards

- Secretary of Artificial Intelligence Competitions, Noshirvani University, Babol, 2023
- Robotex International, Tallin Estonia, 2022
- Participate in German open competitions, @Home Robot, 2018
- American Gold Merit Awards (INPEX), Tehran, 2016
- 1st place in Khwarizmi Robotic Tournament (Surgeon Robot), Tehran, 2012
- Secretary of the Scientific Committee on Tehran Robotics Tournament, 2011
- 1st place in Khwarizmi Youth Festival, Tehran, 2010
- 1st place in second International AUTOCUP Robotic competition, Iran, 2010

## Work Experience

2021 -Ongoing

### Design and Implementation of Intelligent Systems – IRSA, Tehran, Iran

- Artificial Intelligence, Electrical Accessories & Robotic Design
- Analysis Programming, C#, Python, Delphi codes Developer
- ARM / PLC (Siemens)
- ROS, Automation Systems and Smarty systems.

2014–2021

### Electronic and Robot developer at IRSA company, Tehran, Iran

- Robot developer using Image Processing and Artifactual Intelligent (AI)
- Automation Systems
- Visual Data Analysis of people moving in the store. The system intelligently uses
- Smart Home with Intelligent control of electrical appliances consumption (MATLAB Simulink, Python and C#)
- Artificial Intelligence
- @Home Robot

## Projects and Research

- Designer and judge of artificial intelligence and smart city competitions of Noshirvani University of Babol, 2023
- Designing a home robot with the ability to recognize people, recognize objects, recognize voice commands, and locate., 2022
- Robot design with 6 degrees of freedom for sensitive applications, 2022
- Designing an intelligent system with the ability to predict and control energy consumption, 2022
- Design and implementation of solar renewable energy system, 2021
- Making a self-driving car robot, 2021
- Rescue robot design, 2021
- Designing and building a collaborative robot for the company, 2021
- Design and manufacture of robot explorer, 2020
- Automation of the control room system, 2020
- Automation of parallel Robots system, 2019
- Automation of warehouse robot system, 2019
- Automation and intelligent technologies into the urban park system
- Designing a robot for the mentally disabled, 2018
- Analysis of children's behavior with image processing, 2018
- Analysis and identification of difference percentage and grading of goods, 2018
- Software design to identify the percentage of return of facial wrinkles after surgery, 2017
- Detection of the position and size of the left auricle of the heart in medical images, 2017
- Visual Data Analysis & Objects, 2016
- An automated and intelligent system that calculates road traffic to track and report some natural and unnatural events that have occurred, 2015

## Languages

IELTS (6.5)

## Reference:

References available upon request