

MOJTABA FARZANEH

M.Sc. in Electronic Engineering

Email: mojtaba.farzaneh@gmail.com

Website: [Personal Page](#)

Phone: +98 9127336166

LinkedIn: [Mojtaba Farzaneh](#)

PROFILE

Innovative researcher and engineer with 14+ years of experience robotics, AI, and software development. Expertise in machine learning, embedded systems, and control systems with a focus on assistive and industrial applications. Combines industry experience with entrepreneurial background as company owner.

EDUCATION

Master of Science in Electronic Engineering

Hakim Sabzevari University, Iran (2012–2014)

Thesis: Design of a Flexible Capacitive Tactile Sensor

Bachelor of Science in Electronic Engineering

Sabzevar University, Iran (2003–2008)

Thesis: Design of a Robot to Assist Individuals with Mobility Disabilities

SOME OF PATENTS

- | | |
|---|------|
| • Analytical data transmission system including echocardiogram and Ultrasound | 2014 |
| • Designing a new capacitive touch sensor | 2013 |
| • Fault-Tolerant Control of Wind Turbines Based on fuzzy controller | 2013 |
| • AVR coder software | 2010 |
| • Graphic communication of AVR microcontrollers with user | 2008 |
| • Small Printer (A4 Size), capable of printing paper in unlimited size | 2008 |
| • A new blood cell counter set | 2008 |
-

PROFESSIONAL EXPERIENCE

Electronic and Software Researcher & Engineer

MAPNA Group, Iran (2022–2025)

- Delphi, C++ and C# Software Developer of intelligent control systems
- Designed AI software for Smart Tester control systems
- Developed enhanced safety protocols for Warehouse-robot collaboration

Founder & Electronic and Robotics Engineer

NOVINTEK, Iran (2015–2022)

- Designed motion learning algorithms for robotic grasping and manipulation
 - Created assistive robotic prototypes with adaptive control strategies
 - Implemented computer vision systems for object recognition and mapping
 - Collaborated with cross-functional teams to develop robotic solutions
-

KEY RESEARCH PROJECTS

Home Robotic Assistance System (2024)

- Implemented adaptive motion algorithms enhancing user safety and comfort
- Integrated sensor fusion for improved environmental awareness

Energy-Efficient Robotics Control Framework (2023)

- Designed intelligent control strategies reducing energy consumption by 35%
- Developed predictive models for optimizing motion planning efficiency

TECHNICAL SKILLS

Programming & Software Development:

- **C#, C++ Programming:** Excellent knowledge and skills in Ports, OOP
- **Algorithm Design:** Expertise in data structures, with C++ and C# languages
- **Multi-threading:** Proficient in Multithread programming and LAN, CAN Bus programming
- **Cross-Platform Development:** C#/VC++ programming on Windows platform
- **Other Languages:** Python, HTML, CSS, PHP, MATLAB/Simulink

Hardware & Embedded Systems: Altium Designer, Proteus, ARM, AVR microcontrollers, PCB design, Sensor integration

AWARDS & Competitions:

- | | |
|--|--|
| • Participant, Robotex International, Estonia (2022) | • Gold Merit Award, INPEX, USA (2016) |
| • Participant, Robocup German Open (@Home Robot Category) (2018) | • 1st Place, Khwarizmi Robotic Tournament (2012) |

CERTIFICATES

- | | |
|--|-----------|
| • Accept to the comprises 41 entries covering the full spectrum of vision technologies, from sensors to embedded systems in Vision trade fair in Stuttgart | 2016 |
| • 1st place in Khwarizmi Robotic Tournament (Surgeon Robot) | 2012 |
| • Secretary of the Scientific Committee on Tehran Robotics Tournament | 2011 |
| • Referee of Babol's Robotics Tournament | 2014-2024 |
| • 1st place in Khwarizmi Youth Festival | 2010 |
| • 1st place in second International AUTOCUP Robotic competition | 2010 |
| • Become Member of the National Elite Foundation, since 2009 | 2009 |

CORE COMPETENCIES

- **Robotics System Design & Control:** Developed multiple robotic platforms with focus on assistive technologies and industrial automation
- **Machine Learning Implementation:** Applied AI techniques to improve system performance in real-world environments
- **Embedded Systems Development:** Designed custom electronic hardware and firmware for specialized robotic applications
- **Computer Vision Applications:** Implemented vision-based perception systems for autonomous navigation and object manipulation
- **Software Architecture:** Expertise in designing robust, scalable software solutions using modern programming paradigms and best practices

PUBLICATIONS | [Google Scholar](#)

- Energy comparison of MPPT techniques for PV Systems under different atmospheric Conditions HKMF com. Global Scientific Journals 7 (8), 1216 (2019) 2019
- Diagnose the Size of Left Atrial Appendage for Watchman Device. HKMF com Biomedical Sciences 5 (No. 4), 38-44, 2019
- "Flexible Capacitive Sensorsbased on paper sheets." (2016) Fatahi, Masoome, Mojtaba Farzaneh, and SeyedJavad Azimfar. 2016
- Accelerate the Face Recognition Technique Optimization with Spatial context model and discrete cosine transform (DCT)." Mojtaba Farzaneh, Toktam Ebrahim zade, Masoome Fatahi " 2016
- "Simulation of Wind Generator with Fixed Wind" M. Motahari, M. Farzaneh, A. Parsian Nejad. 2014
- Turbine under Matlab-Simulink". World Academy of Science, Engineering and Technology, International Journal of Energy and Power Engineering Vol: 1, No: 12, 2014. 2014
- Accelerate the Face Detection Optimization with Edge Detection and the Discrete Cosine Transform (DCT)", International Journal of Computer Applications 82 (2), 12-14. November 2013. DOI: 10.5120/14086-1197 J. Haddadnia, M. Farzaneh, A. ParsianNejad. " 2013
- "A Novel Methodfor Optimum Electrical Energy Harvesting from Wind Turbines: A Space-Time Modelfor Wind Farm by Neuro-Fuzzy Strategy." Journal of Control 6.3 (2012). Shojaedini, Seyed Vahab, Armin Parsian'nejad, and Mojtaba Farzaneh. 2012