# MohammadHadi Najafi

Embedded Design Manager

Talented professional with a passion for science and technology. Skilled in product design/develop and project management.

## **EDUCATION**

#### High school at <u>Sampad.</u>

[2010 - 2014]

Graduated with honors in national student robotic festivals, demonstrating exceptional talent, innovation, and dedication in the field of robotics.

## • Bachelor's degree at <u>Quchan University of Technology</u>.

[2014 - 2020]

Graduated with honors in national and international robotic festivals and extensive project collaboration experience with companies.

Selected as the best student of the university in the field of research in 2015.

#### WORK EXPRIENCE

## • Innovation Team Manager at Zarrin Samane Shargh Co., Mashhad.

[May 2022 – Dec 2023] – (Full-time)

Product design manager responsible for expanding a knowledge-based company's product list with five new offerings. Utilizing agile techniques to efficiently manage the product design procedure while leading and growing a talented team.

Appreciated as the manager of the company's top evaluation unit.

#### R&D engineer at Zarrin Samane Shargh Co., Mashhad.

[April 2021 – May 2022] – (Full-time)

Collaborate with R&D team to optimize product cost and enhance performance through research and innovation.

research on emerging technologies and solutions in the field of embedded system design, for incorporating them into product development processes.

#### • Product designer at <u>Tavan Pardazesh Co.</u>, Fars.

[August 2020 – February 2021]- (Contract)

Designer and developer of two products utilizing NFC technology for security applications and smart home integration.

#### • Product manager at <u>Datis Sanat Javid Co.</u>, Fars.

[March 2020 – November 2020]- (Contract)

Manager of the design process of a low-cost multimedia panel specifically tailored for elevators, ensuring its development until it reached TRL level 7.

#### Device designer at <u>Tosee Imen Co.</u>, Mashhad.

[July 2019 – September 2020]- (Contract)

Designer and developer of three devices specifically tailored for seamless integration into the company's AVL system.

## • Software developer at <u>Kimia Control Co.</u>, Isfahan.

[September 2018 – July 2019] - (Contract)

Developed an efficient software solution with a team, that captures and logs precise quality parameters at every production station. This innovative system empowers the production line with the ability to exercise effective control over the final quality through data analysis.

#### • The coach and researcher at Zakaria Ins., Fars.

[February 2014 – July 2017] – (part-time)

Robotics and electronics instructor for elementary school students, also researcher in field of robotics and electronics projects.



## Contact



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## Links



in <u>mohammad-hadi-najafi</u>



m.h.najafi



<u>mhnajafi</u>

# Hard skills

Programming	[9/10]
PCB and circuit Design	[8/10]
Embedded System Design	[9/10]
Communication protocols	[8/10]
Linux	[7/10]
Project management	[8/10]

# Soft skills

Management	[9/10]
Problem solving	[9/10]
Creativity	[9/10]
Leadership	[8/10]
Adaptability	[7/10]
Communication	[7/10]

## **ACHIVEMENTS**

#### • 3rd place in the RoboCup <u>IranOpen competition</u>. [2018]

In the @work robots league of RoboCup international robotics competition. I achieved this success by focus on the odometry system accuracy and the image processing performance.

## • Medallion for excellence in the 44th WorldSkills competition. [2017]

5<sup>th</sup> place among 25 countries in the field of mobile robotics skill in the WorldSkills Abu Dhabi. We obtained as the best team in autonomous tests by optimization of the image processing algorithms, but we were weak in manual tests.

#### • Bronze Medal in the 16th national skills competition. [2016]

3rd place among 16 provinces in the field of mobile robotics skill that I acquired by improving the robot's movement accuracy instead of its movement speed.

## • 2nd place in the SharifCup robotics competition. [2015]

in the path finder league of the robotics competition of the Sharif university of technology. I deployed innovative features on the robot to achieve Error-free performance.

## • First place in the 16th NadCup national competition. [2014]

I achieved the best result in the pathfinder robots league by increasing the number of sensors and reducing the robot's weight.

## • First place in the 16th NadCup national competition. [2014]

I got the highest score in the magnet path finder robots league by reducing the size of the magnet coils and increasing their accuracy.

- First place in the 16th <u>NadCup national competition</u>. [2014] In the fighter robots league.
- First place in the 15th <u>NadCup national competition</u>. [2014] In the fighter robots league.
- First place in the 14th <u>NadCup national competition</u>. [2013] In the path finder robots league.

#### TOP PROJECTS

#### • DLMS modem-gateway. [2023]

Designing and managing the development of a Linux-based LTE modem-gateway product with support for DLMS protocol for use in smart grid.

#### • LTE industrial modem-router. [2021-2023]

Designing and managing the development of a Linux-based modem-router product with hardware and software features for industrial applications.

#### • 3-phase mid-voltage fault detector. [2022-2023]

Designing and managing the development of a product used for online monitoring of current values and faults through SCADA and the internet in Electrical Distribution Networks.

#### • Audio guide system for museum visitors. [2019]

Designing and developing a gadget that a visitor can use to hear the description of each station in a museum.

#### • Intelligent Drone flight management and monitoring system. [2017]

Designing and developing an extension for drone autopilot using image processing and object detection, as well as online monitoring and command through a windows application that communicates with the drone using radio link.

#### • Eye pupil movement tracking system. [2016]

Developing an application that uses image processing to find the location of each eye's pupil, deployed on a Raspberry Pi.

## Expert in

- C / C++
- Python
- Agile Scrum
- ARM Microcontrollers
- Embedded Linux
- Debug / Troubleshoot
- Networking / Socket
- Image processing
- Digital Circuit Design
- IOT

## Familiar with

- LABVIEW
- C# .Net
- HTML / Java Script
- SQL server
- Visual Studio
- MATLAB
- Artificial Intelligence
- APQP
- ROS
- GitHub / GitLab
- Encryption / Security
- VLSI

## **Interests**

- Intelligent Systems
- Signal Processing
- MEMS
- Machine Vision
- Bio Electronics
- Robotics
- Telecommunications

# Language

- Persian
- English

# Hobbies







