



Ali Zahedi

Embedded Software Developer



Profile

With a background in the development of embedded systems, my experience over the past 6 years spans the Internet of Things (IOT) and Biomedical Engineering. Throughout these years, I've had the privilege of collaborating with various companies, both full-time and as a freelancer. Additionally, I have successfully contributed to the development of products for different companies in the fields of IoT and Biomedical Engineering.



Work experience

Embedded Software Developer

Freelance (Part-Time), Tehran, Iran

- Various projects in the field of IOT and Biomedical etc.

Smart Apex (Full-Time), Kashan, Isfahan, Iran

- Firmware update project for installed products.
- DALI module project for lighting control.
- IR remote module project for air conditioner.

Robotic Teacher

FIRA academy(Part-Time), Tehran, Iran

- Teaching assemble simple robots.
- Teaching STM32 Micro Controllers Programming.
- Teaching work with Arduino Boards.

Producer of educational content

Digispark.ir(Part-Time), Tehran, Iran

- Production of educational content.



Education

Islamic Azad University Science and Research Branch

Digital Electronic Systems (Masters' degree) *Tehran, Iran*

Shamsipour Technical College

Electronic Engineering (Bachelor's degree) *Tehran, Iran*

Shahid Rajaee Technical and Engineering

Electronic Engineering (Associate's degree) *Kashan, Isfahan, Iran*



Contact



Email

Alixahedi@gmail.com



Phone

+98 913 471 5750



Address

Tehran, Iran



Linkedin

ali-zahedi-b5a360158



Github

Github.com/alixahedi



Skills

C/C++

Advanced

Python

Intermediate

Git

Intermediate

PCB Design

Advanced

STM32

Expert

Arduino

Expert

AVR

Expert

ESP8266

Advanced

ESP32

Advanced

Raspberry pi

Intermediate

RTOS

Intermediate

LVGL

Advanced



Top Projects and Achievements

2023

Carboxy therapy device

Freelance

This product is used to repair and beautify the skin. This product has the main control parts of the pneumatic part, operator interface and output control.

2023

Plasma therapy device

Freelance

This product is used to repair and beautify the skin. This product has the main parts of power output control, operator interface and output control. The plasma created by the device creates a lot of noise and one of the main challenges has been to eliminate this noise.

2023

Smart air conditioner remote control

SMART Apex

This product was used to control air conditioners by a smart system. features of the product are;

- Send and receive IR codes
- Identifying the air conditioner brand
- Save the code of new air conditioner brands
- Communicating with Control4 smart home system
- Web application to communicate with the user

2022

Aquarium status alarm

Freelance

The system designed to control the condition of aquariums for ornamental fish breeders, including the capabilities of this project;

- Alert notification via call and SMS
- Power failure warning
- Air pump failure warning
- Battery use during power outages
- Save the system log

2021

OTA firmware update

SMART Apex

If there is a bug in products exported to other countries, it is very difficult to return and fix the bug. Therefore, it was decided to add a feature on the products so that if a bug is detected in the product, it is possible to update the firmware of the installed product without the need to move the product.

2021

Smart wheelchair patents

TeamWork

An electric wheelchair with the ability to recognize and cross obstacles and follow the nurse, as well as controlling sound processing and displaying 360 degree imaging with a panoramic camera on the screen and the ability to charge with a variable solar cell with a beam radiation angle.



Soft Skills

Communication

ProblemSolving

Teamwork

Flexibility

Innovation