

# Hossein Mokarian Tabari

- Electronic Engineer
- Embedded System Designer
- Embedded Software Engineer

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+989112134037

## EDUCATION

### BSC

Electronic Engineering  
Shiraz University of Technology,  
Iran

### MSC

Electronic Engineering  
Ferdowsi University of Mashhad,  
Iran

## SKILLS

- C/C++
- Python
- Altium, Kicad
- PCB Design
- SWD/JTAG
- Analog/Mixed signal design
- Digital Design
- Verilog
- RTOS
- LTspice
- Embedded Linux
- Database
- Data Structure
- Embedded Software Patterns

## INTERESTS

- IC Design

## CARRIER OBJECTIVE

About 10 years' experience in embedded system design and embedded software programming.

My passion is to implement software engineering concepts on MCU programming.

## WORK EXPERINEC

### Senior Embedded Software Engineer

- Designing pattern for back-end and front-end
- Using database concepts to manage different car ECUs data
- Using data structure concepts to have a clean room
- Using Python and Excel VBA to generate automatic C code from data

### Embedded System Designer

- Designing car diagnostic device from scratch
- Using ARM CortexM4 MCU
- TFT LCD 3.5" through FSMC connection
- Micro SD card through SDIO
- STemWin library

## OPEN SOURCE PROJECTS

### Open Earbuds

- STM32WB, Bluetooth low energy
- Chip antenna
- 4 layers PCB
- TOF sensor
- Audio codec
- Amplifier class H
- Digital MEMS microphone
- Power line communication for battery charging control
- Touch capacitive sensor on PCB
- Flex-rigid PCB
- MEMS speaker
- Power management IC
- [GitHub link](#)

### Open Health Band

- Custom rotary encoder
- Optocoupler and TIA circuit design
- Body temp sensor
- Blood pressure sensor
- Heart beat rate
- E-paper LCD
- Low power
- BLE 5.2
- [GitHub link](#)

### Open Lightning

- Smart light key
- Dimmer
- BLE 5.2
- BlueNRG-2

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- IC Design

## OPEN SOURCE PROJECTS (Cont.)

### Open Lightning (Cont.)

- AC coupler
- Simple, low cost power line communication circuit
- Zero crossing detection circuit
- LED drive
- Touch capacitive sensor
- Humidity and temp sensor
- Ambient light sensor
- [GitHub link](#)

### RFID Handheld

- STM32F427
- TFT LCD 2.4" (FMC)
- ESP8266 Module
- Micro SD card (SDIO)
- RFID
- Custom RFID antenna design on PCB
- [GitHub link](#)