# Mohammad Mahmoodian

# Curriculum vitae

#### WORK EXPERIENCE

SEPTEMBER 2019 - PRESENT

PAD Lab, UTSTPark, Tehran, Iran

## Blockchain Developer

Work on popular cryptocurrency source codes at PAD (Processing and Analysis Data) lab under the supervision of Mahsan Co. in the UTSTPark (University of Tehran Science and Technology Park).

AUGUST 2020

Freelance

## Software and Hardware Developer

Programmed a nordic Soc to capture data from an OSRAM Opto Semiconductor (SFH7070). Developed an app in Android Studio to communicate with the nRF through the BLE and display the captured data.

**MARCH 2020** 

Freelance

## Software Developer

Developed real-time people counting for the video stream, with help of computer vision and deep learning. Implemented Smart object detection and object tracking.

MARCH 2019 - SEPTEMBER 2019

Datis, Tehran, Iran

## Hardware Developer

programmed STM32 Arm Cortex MCUs and developed elevator drives at Datis Elevator.

February 2017 - Present

MCS Lab in the University of Tehran

# Software Developer and Research Assistant

Worked on Linux-based operating systems (e.g., OpenWrt) and installed them on Wi-Fi routers.

JANUARY 2018 - JANUARY 2019

Farineh Fanavar, Tehran, Iran

## Software Developer

Implemented IoT protocols using blockchain and smart contracts. Worked with tools such as truffle and Geth (Go Ethereum) to test and simulate smart grids at Farineh Fanavar.

- 🙇 | Tehran, Iran
- **+**98 (938) 3172746
- ⊠ mahmoodian@ut.ac.ir
- in www.linkedin.com/in/mohammad-mahmoodian-397a508a
- www.github.com/momaee

## **PROJECTS**

## 2020 **NEO Cryptocurrency Source Code**Edited NEO client source code in C# pr

Edited NEO client source code in C# programming language.

## 2020 TON Cryptocurrency Source Code

Edited TON (Telegram Open Network) client source code and added some features to it.

#### 2019 **Geth**

Work with Go-Ethereum (official Go implementation of Ethereum protocol) and add some features to it (e.g. writing data onto CassandraDB, Neo4jDB, LevelDB, etc.).

#### 2020 Android Studio

Developed an app in Android Studio using Java programming language to connect to a device through BLE and display received data.

#### 2020 Nordic nRF

Worked with Nordic nRF52840 SoC and programming the chip, in C programming language using Keil IDE.

#### 2020 **OpenCV**

Implemented a real-time people counter using OpenCV, SciPy, etc. in Python language programming.

#### 2019 STM32 Discovery Kit

Programmed STM32 MCUs in Keil in C programming language.

#### 2018 Smart Contracts

Built smart contracts using solidity and hyperledger sawtooth. used web3 Restful api in Python and JavaScript to connect to blockchain.

#### 2018 **Zigbee**

Implemented Zigbee protocol on XBee modules using Keil.

#### 2017 **OpenWrt**

Installation of OpenWrt on routers.

#### **EDUCATION**

2017 - 2020 Electrical Engineering - Net-

work Communications

MASTER OF SCIENCE *University of Tehran* 

GPA: 18.8 Rank: 1

2013 - 2017 Electrical Engineering - Com-

munications

BACHELOR OF SCIENCE *University of Tehran.* 

GPA: 18.4 Rank: 8

#### SELECTED COURSES

Pattern Recognition  $(\frac{19.2}{20})$ Data Networks  $(\frac{20}{20})$ 

Advanced Programming  $(\frac{18}{20})$ Distributed Optimization  $(\frac{19}{20})$ 

Stochastic Processes  $(\frac{19}{20})$ 

Cellar Networks  $(\frac{20}{20})$ 

### SOFTWARE AND HARDWARE SKILLS

GOOD LEVEL Python, Go, Cryptocurrency,

Solidity, C, C++, C#, Java, Android Studio, git, Linux, Restful APIs, OpenCV,

Scikit-learn, MNIST, SVM, IP Networking, Matlab, Neo4j Database, LevelDB, Cassandra

Database, MongoDB

INTERMEDIATE Hyperledger, LATEX, Spark,

Hive, Hadoop, LabVIEW, Keil,

ModelSim, Quartus,

Wireshark, shell, AVR, Verilog,

HTML, JavaScript

BASIC LEVEL Windows, Microsoft Word,

PSpice, HSpice

## COMMUNICATION SKILLS

Persian Native speaker

ENGLISH Good

#### REFERENCES

Dr. Behnam Bahrak

Position Assistant Professor

School of Electrical and Computer Engineering

University of Tehran **Dr. Vahid Shahmansouri** 

POSITION Assistant Professor

School of Electrical and Computer Engineering

University of Tehran **Dr. Masih Nilchian** 

POSITION Chief Technology Officer

MyPulses Co.