

# 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.

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🐙 [www.github.com/momaee](https://www.github.com/momaee)

### PROJECTS

- 2020 **NEO Cryptocurrency Source Code**  
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

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2017 – 2020	<b>Electrical Engineering - Network Communications</b> MASTER OF SCIENCE <i>University of Tehran</i> GPA: 18.8 Rank: 1
2013 – 2017	<b>Electrical Engineering - Communications</b> BACHELOR OF SCIENCE <i>University of Tehran.</i> GPA: 18.4 Rank: 8

## SELECTED COURSES

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Pattern Recognition ( $\frac{19.2}{20}$ )	Advanced Programming ( $\frac{18}{20}$ )
Data Networks ( $\frac{20}{20}$ )	Distributed Optimization ( $\frac{19}{20}$ )
Stochastic Processes ( $\frac{19}{20}$ )	Cellar Networks ( $\frac{20}{20}$ )

## SOFTWARE AND HARDWARE SKILLS

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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, $\LaTeX$ , LabVIEW, Keil, ModelSim, Quartus, Wireshark, shell, AVR, Verilog, HTML, JavaScript
BASIC LEVEL	Windows, Microsoft Word, PSpice, HSpice

## COMMUNICATION SKILLS

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PERSIAN	Native speaker
ENGLISH	Good

## REFERENCES

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	<b>Dr. Behnam Bahrak</b>
POSITION	Assistant Professor School of Electrical and Computer Engineering <i>University of Tehran</i>
	<b>Dr. Vahid Shahmansouri</b>
POSITION	Assistant Professor School of Electrical and Computer Engineering <i>University of Tehran</i>
	<b>Dr. Masih Nilchian</b>
POSITION	Chief Technology Officer MyPulses Co.