

Mohammad SIAVASHI

PERSONAL DATA

PLACE AND DATE OF BIRTH: Ilam, Iran | 6th April 1996
ADDRESS: School of Electrical and Computer Engineering Shiraz University, Shiraz, Iran
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EDUCATION

2014 - 2019 **B.Sc** in COMPUTER ENGINEERING, **Shiraz University**, Shiraz, Iran
2010 - 2014 **Diploma** in PHYSICS AND MATHEMATICS, **Mottahari high school**, Ilam, Iran

CERTIFICATES

June 17, 2019 Neural Networks and Deep Learning, by Andrew Ng from deeplearning.ai on Coursera.

PUBLICATIONS

M. Zarezadeh, M. A. Talouki, and M. Siavashi, "**Attribute-based Access Control for Cloud-based Electronic Health Record (EHR) Systems**" *ISecure*, 2020. Accepted for publication.

M. Siavashi and S. Zarezadeh, "**An Algorithm for computing the t-signature of two-state networks**", *Submitted to communications in statistics - simulation and computation*. ([arXiv](#))

Translations

A. Siavashi, M. Abdollahi, F. Hosseinkhani, and M. Siavashi, "**The Art of Concurrency: A Thread Monkey's Guide to Writing Parallel Applications**," by Clay Breshears, *To Persian*, 2019.

CONFERENCE PRESENTATION

S. Zarezadeh and M. Siavashi, "**An algorithm to assess t-signature**," *The 3rd Seminar on Reliability Theory and its Applications*, Ferdowsi University of Mashhad, Mashhad, Iran, May 2017.

WORKSHOPS & PRESENTATIONS

"Computer vision with openCV," Volunteer Workshop in Libre Education Talks Group, Shiraz University, Shiraz, Iran, 2017

"Basics of cyber security," Volunteer Presentation in Libre Education Talks Group, Shiraz University, Shiraz, Iran, 2018

WORK EXPERIENCE

March 2020 - Present	Head of QA department at FARAZ HOLDING (TOURISM BANK), Tehran, Tehran, Iran
January 2020 - March 2020	System architecture and Node.js developer at GARDEHPAY INC. (FARAZ HOLDING - TOURISM BANK), Tehran, Tehran, Iran
2018 - Present	Co-Founder and Blockchain Lead at OPU LABS INC. Bay Area, CA, USA Remote
2018 - Present	Co-Founder and Blockchain Lead at ARIGO ENTERTAINMENT INC. Palo Alto, CA, USA Remote
April 2018 AUGUST 2018	Python Developer at ERTEBAT GOSTAR SOBAT (EGS) Tehran, Iran
2016 - 2017	Internship at IRANIAN SYSTEM ARA, Tehran, Iran Worked as an Android developer in Iranian System Ara. The project released for inter-company usages.
2016 - 2017	Security researcher & C++ developer at DPE, Tehran, Iran Malicious software and web attacks are becoming more and more threatening every day, so we have been studying attack scenarios to develop a more secure environment to be deployed in Bank systems to protect users.
2008 - 2012	Co-Founder of PERSIAN GAMERS FORUM AND MAGAZINE Co-Founder of the professional IT news agency, forum, market, and magazine. The magazine was the 1 st professional e-magazine about video games and IT industry in Iran. The site is no longer available.

TEACHING ASSISTANTSHIPS

Spring 2019	Advanced Programming (Java & Software Design) Dr. Ali Hamze
Fall 2018	Principle of Programming (C Language) Dr. Ali Hamze
Spring 2018	Advanced Programming (Java & Software Design) Dr. Ali Hamze
Spring 2018	Computer Network Lab Dr. Koorush Ziarati
Fall 2017	Advanced Programming (Java & Software Design) Dr. Ali Hamze

SELECTED PROJECTS

2014	Forth language interpreter (Github) Python
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- Educational FORTH language interpreter is written as the first project in Python. The project is available on GitHub.
- 2014 | **Rack OS ([Github](#))**
ANSI C + x86 Assembly
 Rack OS is an operating system built to serve as an educational development environment written based on James Molloy's tutorial with a simple file system to get developers started.
- 2014 | **Lisa OS ([Github](#))**
ANSI C & x86 Assembly
 An Educational operating system written on top of the Rack OS, including MIPS Assembly Compiler written in ANSI C.
- 2015 | **Operating system & drivers ([Github](#))**
x86 Assembly
 An OS with drivers, calculator and a piano application written entirely in X86 Assembly.
- 2016 | **Version control**
Java + JavaFX
 Client/Server version control desktop application using java and javafx.
- 2016 | **Shiraz University self-service seservation hybrid mobile application ([Github](#))**
React Native
 Self-Service reservation mobile application for Shiraz University for both IOS and Android devices. The applications are not available now.
- 2017 | **New algorithm for perfectly-secure multiparty computation based on BGW (Ben-Or, Goldwasser and Widgerson) protocol ([Github](#))**
Python
 In the setting of secure multiparty computation, a set of n parties with private inputs wish to jointly compute some functionality of their inputs. the context of this project is that each party can resolve a polynomial without knowing each other input hence decrypt messages. the project is available on GitHub.
- 2017 | **Optical marker recognition (OMR) system with statistical data analysis system.**
Python + openCV
 Developed and deployed high accuracy OMR system to scan multiple choice exams with statistical data analysis system to produce high accuracy result and guidance for each individual. The institution was holding university entrance exams for medical students.
- 2017 | **DES encryption on FPGA (SPARTAN 6) ([Github](#))**
Verilog
 DES encryption/decryption implemented on Xilinx Spartan 6 FPGA. The project is available on GitHub.
- 2018 | **Open source E-commerce platform ([Github](#))**
Python + Flask
 Fully featured e-commerce platform written in python & flask.
- 2018 | **Vesta E-school platform ([fa](#) / [en](#))**
Node.js Backend
 Vesta is a country-first E-Education platform that has been released as both Mobile & Web applications and has been used by wide range of educational institutions including schools since release.

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| 2019 | Final year project: Ethereum wallet(Github)
<i>Node.js + Vue.js</i>
The platform is a secure web application that performs as a doorway to the Ethereum blockchain. Wallthereum is developed under the supervision of Dr. Farshad Khunjush as open-source project. |
| 2019 | Final year project: Ethereum wallet for Android (Github)
<i>Android - Java</i>
It is completely open-source and designed under the supervision of Dr. Farshad Khunjush. |
| 2019 | Face liveness detection
<i>Python - Keras (Tensorflow Backend)</i>
Implemented a face liveness detection model based on ROSE-Youtu dataset. |
| 2020 | Wireless handheld barcode reader
<i>ESP8266 & 3D Printer</i>
Designed and produced a wireless handheld barcode reader and a wireless dongle for corded barcode readers. |
| 2020 | iSEUS Inc. website (iSEUS)
<i>Python - Django</i>
Implemented the iSEUS research institution website. The company works on renewable energies. |
| 2020 | Activity management and messenger platform (dgperron Inc.)
<i>Vue.js</i>
Implemented Activity management and instant messenger web application's front-end using Vue.js. |

AWARDS & HONORS

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| 2010 | Accepted to a national highschool for exceptional students through entry exam. |
| 2011 | Ranked 1 nd in province in the 2 nd English Conference of Ilam, Ilam, Iran. |
| 2013 | Graduate with honor with diploma GPA 91%. |
| 2014 | Graduated pre-university as 2 nd rank with GPA 87%. |
| 2014 | Ranked among 0.5% top students of national university entrance exam (222,507 participants). |
| 2014 | Selected as 1 st best python project among all course students. |
| 2015 | Ranked 1 st student in principle of programming course with 100% score. |
| 2015 | Selected as 1 st best project in principle of programming course. |
| 2015-2016 | Selected as member of computer department science forum at shiraz university. |
| 2016 | Selected as 1 st best project in machine language course. |
| 2016 | Selected as 1 st best project in computer architecture course. |
| 2018 | Selected as 1 st best project in mobile programming course. |
| 2019 | Ranked among 0.5% top students of national university exam for M.Sc in computer engineering. |
| 2019 | Ranked among 0.3% top students of national university exam for M.Sc in IT. |

LANGUAGES

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| ENGLISH: | Full professional proficiency |
| ARABIC: | Native proficiency |
| PERSIAN: | Mothertongue |
| KURDISH: | Mothertongue |

SKILLS & EXPERIENCES

1. Deep Learning (Tensorflow, Theano, Keras)
2. Computer vision (openCV)
3. Python 2 & 3
4. Java EE
5. Blockchain (Solidity, Hyperledger Fabric)
6. Javascript (Node.js)
7. Typescript
8. Web frontend development (Vue.js, React.js, HTML5, CSS3)
9. C/C++
10. CUDA
11. C#
12. Scala
13. Android development (Java)
14. UML
15. ERD
16. OOP design patterns (gang of four)
17. Microservice and its design patterns
18. Assembly (x86, MIPS)
19. Ruby
20. PHP
21. Micro-Controller (AVR ATMEGA 16, ATMEGA 32, ARM Cortex m3, Arduino, ESP32, ESP8266)
22. Augmented reality (Unity)
23. Database (Sql & NoSql)
24. \LaTeX
25. Git
26. Mercurial
27. Penetration testing & reverse engineering

INTERESTS AND ACTIVITIES

Technology, Programming
Poem, Psychoanalysis, Reading
Swimming, Travelling

REFERENCES

Dr. Farshad Khunjush
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Computer Science & Engineering
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