

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

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.

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

AWARDS & HONORS

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

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

CERTIFICATES

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

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.

SELECTED PROJECTS

2014	Forth language interpreter (Github) <i>Python</i> Educational FORTH language interpreter is written as the first project in Python. The project is available on GitHub.
2014	Rack OS (Github) <i>ANSI C + x86 Assembly</i> 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) <i>ANSI C & x86 Assembly</i> An Educational operating system written on top of the Rack OS, including MIPS Assembly Compiler written in ANSI C.
2015	Operating system & drivers (Github) <i>x86 Assembly</i> An OS with drivers, calculator and a piano application written entirely in X86 Assembly.
2016	Version control

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| | Java + JavaFX
Client/Server version control desktop application using java and javafx. |
| 2016 | Shiraz University self-service seservation hybrid mobile application (Github)
<i>React Native</i>
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)
<i>Python</i>
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.
<i>Python + openCV</i>
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)
<i>Verilog</i>
DES encryption/decryption implemented on Xilinx Spartan 6 FPGA. The project is available on GitHub. |
| 2018 | Open source E-commerce platform (Github)
<i>Python + Flask</i>
Fully featured e-commerce platform written in python & flask. |
| 2018 | Vesta E-school platform (fa / en)
<i>Node.js Backend</i>
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. |
| 2019 | Ethereum Blockchain platform(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 | Wallthereum for Android (Github)
<i>Android - Java</i>
Wallthereum for Android is the Android Application for the Ethereum Blockchain Platform. 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.

LANGUAGES

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

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