

# 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  
PHONE: +98 918 340 6229  
EMAIL: [mohammad.siav@hotmail.com](mailto:mohammad.siav@hotmail.com)  
GITHUB: [github.com/msiavashi](https://github.com/msiavashi)

## WORK EXPERIENCE

---

<i>Current</i> APRIL 2018	Python Developer at ERTEBAT GOSTAR SOBAT (EGS) Tehran, Iran
2017 - 2018	Member of SHIRAZ UNIVERSITY BUSINESS INTELLIGENCE (BI) PROJECT team Worked as Java Spring Developer in Shiraz University Business intelligence (BI) project. The project is still in development phase.
2016 - 2017	ANDROID Developer 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 Expert at DADE PARDAZ SHARGH (DPE), Tehran, Iran <i>Security researcher and c++ security software developer</i> Malicious software and web attacks are becoming more and more threatening every day, so we have been studying threats scenarios and analyze malware to develop a more a secure environment to be deployed in Banks systems to protect users.
2008 - 2012	Co-Founder of PERSIAN GAMERS FORUM AND MAGAZINE Co-Founder of the professional PGF games news agency, forum, market, and magazine. The magazine was the 1 <sup>st</sup> professional e-magazine about video games in Iran. The site in no longer available.

## EDUCATION

---

2014 - PRESENT	<b>B.Sc in COMPUTER ENGINEERING, Shiraz University, Shiraz, Iran</b>
2010 - 2014	<b>Diploma in PHYSICS AND MATHEMATICS, Mottahari high school, Ilam, Iran</b>

## SELECTED PROJECTS

---

- |      |  |
|------|--|
| 2014 | <b>Forth Language Interpreter</b><br><i>Python</i><br>Educational FORTH language interpreter is written as the first project in Python. The project is available on GitHub.  |
| 2014 | <b>Rack OS</b><br><i>ANSI C</i><br>Educational operating system is written in ANSI C, including MIPS Assembly Compiler also written purely in ANSI C. The project is available on GitHub.  |
| 2015 | <b>Operating System &amp; Drivers</b><br><i>x86 Assembly</i><br>Operating System with sound, keyboard and mouse drivers implemented purely in X86 Assembly with a simple calculator and piano application installed. The project is available on GitHub.   |
| 2016 | <b>Version Control</b><br><i>Java + JavaFX</i><br>Client/Server version control desktop application using java and javafx.   |
| 2016 | <b>Shiraz University Self-Service Reservation Hybrid Mobile Application</b><br><i>React Native</i><br>Self-Service reservation mobile application for shiraz university for both IOS and ANDROID devices. the applications are not available now.  |
| 2017 | <b>New Algorithm for Perfectly-Secure Multiparty Computation based on BGW (Ben-Or, Goldwasser and Widgerson) Protocol</b><br><i>Python</i><br>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 | <b>Optical Marker Recognition (OMR) System with Statistical Data Analysis System for INME Institution, Tehran, Iran</b><br><i>Python + openCV</i><br>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 | <b>DES Encryption on FPGA (SPARTAN 6)</b><br><i>Verilog</i><br>DES encryption/decryption implemented on Xilinx Spartan 6 FPGA. The project is available on GitHub.   |
| 2018 | <b>E-Commerce Platform</b><br><i>Python + Flask</i><br>Fully featured e-commerce platform written in python & flask for EGS company, Tehran, Iran.   |

## CONFERENCE PRESENTATION

---

"An algorithm to assess t-signature," The 3rd Seminar on Reliability Theory and its Applications, Department of Statistics. Ferdowsi University of Mashhad, Mashhad, Iran, May 2017.

## CONFERENCE PROCEEDINGS

---

"An algorithm to assess t-signature," With S. Zarezade in Proceedings of Reliability Theory and its Applications Conference, Ferdowsi University of Mashhad, Mashhad, Iran, May 2017.

## TEACHING ASSISTANTSHIPS

---

*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

---

- 2011* Ranked 2<sup>nd</sup> in province in the 2<sup>nd</sup> English Conference of Ilam, Ilam, Iran.
- 2014* Selected as 1<sup>st</sup> Best Python Project Among all Course Students.
- 2015* Ranked 1<sup>st</sup> Student in Principle of Programming Course with 100% Score.
- 2015* Selected as 1<sup>st</sup> Best Project in Principle of Programming Course.
- 2015-2016* Selected as Member of Computer Department Science Forum at Shiraz University

## LANGUAGES

---

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

## SKILLS

---

1. Python 2 & 3
  - Flask
  - Django
  - OpenCV
  - SQLAlchemy
2. Java EE
  - JavaFX
  - Spring boot
  - Hibernate
  - jetty
  - netty
  - apache tomcat
3. C
  - C99

- C89
- 4. C++
- 5. C#
  - WPF
  - WinForms
  - Linq
- 6. Android Development
- 7. Assembly
  - x86
  - MIPS
- 8. Javascript
  - Node.js
  - React.js
  - React Native
  - Vue.js
  - Knockout.js
  - Angular.js
  - Angular material
  - mongoose
  - express.js
- 9. Ruby
  - Ruby on Rails
- 10. PHP
  - Laravel
- 11. Hardware
  - micro-controller (AVR + ARM Cortex m3 + Arduino)
  - FPGA + HDL Design Techniques (HW/SW Co-design, CORDIC, Piplining, ...)
- 12. web development
  - javascript + frameworks
  - css 3
  - html 5
- 13. Unity Game Engine
  - c#
- 14. Augmented Reality
  - Vuforia + Unity
  - Wikitude + Unity
  - ARToolkit + Unity

- EasyAR + Unity
- Maxst + Unity
- 15. Database-related
  - SQL
  - ORM (object relational mapper)
  - ODM (object document mapper)
  - MySQL
  - MongoDB
  - PostgreSQL
  - SQLite
  - Redis
- 16. Scientific/Documentation Tools
  - Matlab
  - $\text{\LaTeX}$
- 17. Version Control
  - Git
  - Mercurial
- 18. Penetration Testing & reverse engineering
  - network
  - web application
  - android application
  - desktop application
- 19. UML
- 20. ERD
- 21. OOP Design Patterns (Gang of Four)

## INTERESTS AND ACTIVITIES

---

Technology, Programming  
Poem, Psychoanalysis, Reading  
Swimming, Travelling