

# ALIREZA HAFEZ

M. Sc. Computer Software Engineering Student

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🌐 <https://github.com/AlirezaHafez>



## WORK EXPERIENCE

### Lead Developer and Project Manager

**Concept Co.**

📅 February 2016 – December 2017    📍 Tehran

- Designed and developed Online Parking Reservation System and offline taxi-meter based on GPS, GMS Location API, accelerometer and taxi driver behaviors to avoid satellite locking errors in calculations
- Designed and developed Real-Time tracking and recording solutions for TAP30 by Data Base Improvement Solutions such as Load Balancing SNAPP

### Penetration Tester and Security Consultant

**Shiraz University ICTC**

📅 May 2014 – December 2015    📍 Shiraz

- Exposed architectural flaws in the university's Infrastructures such as exposing servers to the internet that are supposed to be in the internal network
- Developed new tools for SQLi, GPU accelerated brute-forcing, wifi jamming in order to expose the softwares' weaknesses

### Lead Developer and Designer

**Coffee MIPS**

📅 September 2016 – February 2017    📍 Tehran

- Developed a design that unlike the NACH-OS, this application is a full Java-based MIPS machine with ram, OS, assembler, and one step execution
- Developed the UI, and the architectural design from scratch using Java in order to test and understand the details of the processes in CPU

### Lead Developer

**Shiraz University**

📅 September 2014 – February 2015    📍 Shiraz

- Developed an algorithm for keywords similarities between non-Persian words and Persian words based on fuzzy likelihood with python
- The program developed was capable of detecting likelihood in any other languages without relying on context and knowledge about the second language while using minimal resources

## EDUCATION

### Computer Software Engineering, M.Sc.

**University of Alberta**

📅 September 2017 – May 2019

### Computer Software Engineering, B.Sc.

**Shiraz University**

📅 September 2011 – June 2016

## TECHNICAL SKILLS

#### • Languages

Proficient in C, C++, CUDA, x86 Assembly, ARM Assembly, Java, Android, .NET, JavaScript, Node.js, PHP, HTML, CSS, BASH, Python 2, Unity, CryEngine (Basic), and Unreal Engine (Basic)

#### • Security Topics

Proficient in Designing and Implementing Network Protocols, Socket Programming, secure Programming in PHP, Java and Node.js, software penetration testing (web-based, Desktop), Cracking passwords, Exploiting, Malware Development (C/C++, and Delphi) and Software Analysis (OllyDbg, and Sandboxie)

#### • Databases

Proficient in MySQL, Postgres, PostGIS, Oracle, Access, DB2, Redis, and MongoDB

#### • Operating System

Proficient in UNIX (Free BSD), Linux (Including LFS), and Windows

#### • Technologies and Frameworks

Proficient in Sails.js, Express.js, Sequelize, TypeScript, Ember.js, Spring, Laravel 5, Yii, JSF, JSP, Spark (Based On Jetty), Jetty, Netty, Django, Swing, JavaFX, Ionic, Socket.io, Nginx, and HAProxy