

Jafar Akhondali

Tehran, Iran



<https://akhondali.ir>



+98-9013906827



<https://github.com/JafarAkhondali>



Jafar.akhoondali@gmail.com



<https://www.linkedin.com/in/jafar-akhoondali/>

Interests

Web Development

Software Engineering

Security

IoT

Machine Learning

Mobile Development

\$(whoami)

Everything related to computers makes me excited. I love to see different aspects of different fields to provide the best solution for problems. With several years of experience in web development and security, I see challenges with multiple points of view such as safety, performance, and user experience. I've started programming when I was 14 using C++ and then tried to learn various programming languages and technologies and used them in different fields.

Professional Work Experience

2019 - 2020

Full Stack developer (Node + Vue), Mofid Securities (Iran's largest full-service stock brokerage firm & leading private investment advisory. Iran's 1st brokerage firm since 2007) remote, Tehran, Iran.

Worked on backend and Admin Panel of a project called Bambo, which helps people in achieving financial goals. We've used Mongo as our main database and Redis for caching and race-condition mitigation. My main role was developing backend (using Express) for the Bambo application and developing backend and front end of admin panel (using Vue). Every merge request were peer reviewed by developers of each platform and unit tests and linting were mandatory in our pipeline. Having various company-wide services, managing external services unavailability, job management and race conditions were parts of challenging tasks.

2015 - 2018

Web Application Security Penetration Tester, Pavan Security Solutions Tehran, Iran.

Penetration Testing on Web Applications, Android Application, Windows Applications. Researching on Security Topologies of Enterprise Environments and Services like Banks or government organizations.

- 2018 **Web Application Penetration Tester**, Cert Center of Isfahan, Isfahan, Iran.
- 2018 **Designing and Implementing Article and Paper Submission and Judging System (With Id Card Generation and Android QR code Scanner Application) for 3rd National congress on Iran's Irrigation & Drainage and 5th National Conference on Irrigation and Drainage Networks Management**, Water engineering faculty, Shahid Chamran University of Ahwaz.
 We've developed a web application for handling paper submissions with various features to handle a national conference using Laravel and old-school based front end development (Jquery + bootstrap)
- 2018 **Survey designer front end platform for web**, DgTeam, Tehran, Iran.
 I've handled a dynamic survey builder on front end (like google forms) with 9 types of questions. As an experiment to be light weight as much (not always a great idea!) the front end has been developed using vanilla JS with custom state manager and dynamic dom creation in ES6.
- 2016 - 2018 **Nodejs (Electron) and Arduino Programmer for Manual Deminer Robot**,
 Robot had more than 6 arms and needed to get data from metal detector sensor, Operated remotely with help of 4 cameras. The robot acted as a Server and the client was built with Electorn. It could connect to Robot, handle all arms. Visualizing and playing interval alert sound for detecting was part of the jobs.
- 2017 **Arc GIS ToolBox Android Application**, Ahwaz, Iran.
 Android application which renders GIS custom layers on Google Maps and merges data with Google Maps API, Saves and exports data, etc wrote in Java.
- 2016 **Students Association Members Polling System for Shahid Chamran University**.
 Shahid Chamran University has near 20 thousand active students and more than 10 faculties. The polling system was developed in Laravel and data has been extracted from 60 Excel files.
- 2015 **Draw in The Air Using OpenCV and C++**.
 Write in front of a webcam using and LED powered pen on the air and see the result on your screen.
- 2015 **Android application for Movies schedule program all over Ahwaz with Cordova**, 1st International Ahwaz Scientific film festival, Ahwaz, Iran.
- 2008 - 2013 **Manager of Cryptography, Web Front End, Back End,Development and XSS Sections of Ashiyane Digital Security Team forums**, Remote.
-
- 2018 - Present **M.Sc. in Secure Computing**, University of Shiraz, Shiraz, Iran.
- 2014 - 2018 **B.Sc. in Computer Engineering (Software)**, Shahid Chamran University, Ahwaz,

Iran.

Thesis: "Design and Implementation of an Accelerated and Efficient Platform for Virtualization Network Functions"

The goal of this research was implementing network functions such as Firewall and Load-Balancer in operating system level virtualization environments like docker containers. In order to prepare this high speed platform, High-Speed network cards with 10Gbps speed has been used. Besides, Data Plane Development Kit Framework (offered by Intel.Co) has been used for fast packet processing. In addition, OpenNetVM has been utilized for connecting different services and improving overall performance of platform.

Technical skills

Programming Language	JavaScript (ES5, ES6, ES7, TypeScript, CoffeScript), NodeJs(ExpressJs, Adonis, HapiJs), Python, Php (Pure and Laravel), Css (Pure and Sass), C#, Java(Pure and Kotlin), C++, SQL, Arduino, Assembly, Matlab, Bash, Rust
Typesetting	LaTex, Libreoffice, MicrosoftOffice
Operating Systems	Linux(Debian, Ubuntu, Arch, CentOS, Raspbian, Kali), Windows, Android
Embedded Systems	Raspberry, Arduino
Source Control	Git
Messaging	RabbitMQ
Virtualization and Containers	Virtualbox, VMWare (ESXi, Workstation), Docker
DBMS	Mysql, Mongo, Sqlite, Redis

Awards and Honors

2020	4th Rank in UUT CTF competition(world-wide) as team.
2020	10th Rank , in SuSeC CTF competition(world-wide) as team.
2019	12th Rank , in UUT CTF competition(world-wide) as team.
2019	Completed Hacktoberfest Challenge
2019	1st Rank , Overall GPA in Ms.c Students. Shiraz University of Iran.
2018	1st Rank , Web UI Development in Fanavard Competition as team(country-wide).
2017	3rd Rank , Esfahan Capture the Flag Security Competition(country-wide) as team.
2017	Completed Hacktoberfest Challenge
2016	4th Rank , Web UI Development in Fanavard Competition(country-wide).
2012	1st Rank , Software in Kharazmi competition in Khuzestan Province

Designing a security-focused browser(Using IE Engine) capable of:

- Semi-automated Sql Injections attacks And bypassing various web application firewalls
- XSS Attacks
- RFI, LFI Attacks
- Encoders and Decoders (Text and IP)
- Hash Analyzer

- Fake Page Creator
- Port Scanner
- HTTP Form Brute-Forcer (Supporting both Dictionary and Brute force Attacks in multi-thread)

Presentations

- 2017 **Instructor of Computer Systems Security Workshop**, Shahid Chamran University.
 Introduction of Malware Analysis
 Dynamics Analysis of WannaCry Ransomware
 Introduction of Rootkits (Linux and Windows)
 Linux Hardening
- 2017 **Instructor of DVWA Framework**, Shahid Chamran University.
 Explain some Vulnerabilities with exploitation examples and mitigation techniques in DVWA Framework.
 LFI (Local File Inclusion) XSS (Cross-site Scripting)
 SQLi (SQL Injection) RCE (Remote Code Execution)
- 2014 **Instructor of Hack & Anti-Hack Seminar**, Shahid Chamran University.

Academic Research

- 2019 **"An Empirical Study of C++ Vulnerabilities in Crowd-Sourced Code Examples"**, 3rd author in IEEE Transactions on Software Engineering journal (under review).
 Global News Impact: [MSN](#), [BBC](#), [The Register](#), [StackExchange](#), [Fossbytes](#), etc.

Academic Work Experience

- 2020 **Teacher Assistant for Cryptography Mathematics course**, Department of Computer Engineering, Shiraz University, Shiraz, Iran.
- 2019 **Personal Teacher for Python programming.**
- 2016 - 2018 **Teacher for Python programming course**, Dsoon Education Department, Ahwaz, Iran.
- 2016 - 2018 **Teacher Assistant for Principles of Programming course**, Department of Computer Engineering, Shahid Chamran University, Ahwaz, Iran.
- 2015 – 2017 **Teacher for Web Front End Development course**, Department of Computer Engineering, Shahid Chamran University, Ahwaz, Iran.
- 2014 - 2018 **Advising Students on their problems in Database Designing, C++, Java, Android Development, Web Development, Linux, IOT, etc.** Department of Computer Engineering, Shahid Chamran University, Ahwaz, Iran.
- 2010 – 2012 **Advising Students on their problems in Robotics.** Negar Electronic Robotic Team, Ahwaz, Iran.
 Helping students mostly in programming problems in Robotics in fields like Line followers Robots, Maze solvers and

Courses

2019-2020	English course in Fakher language institute, Shiraz, Iran.
2010-2012	English course in Iran language institute, Ahwaz, Iran.
2010	Robotic programming and implementing for Roboro Kit, Negar electronic, Ahwaz.
2009	Implementing tel-operated drones, Ahwaz Airport.

Open Source contributions (limited) – on [Github](#)



2019	Creator of Iran Credit Card OCR – An attempt to find a credit card in image and detect the card number and bank name using OpenCV, python and Scikit-learn.	2
2019	Creator of Android Spectral UPB Meter – show and records spectral lights in real time (using gpu) by OpenCV and Kotlin.	0
2019	Creator for Remove Github Restrictions Message - An attempt to disrespect the disrespecting action of Github to the open source world by removing sanctions forced message on profile by browser extensions.	17
2019	Creator of Forgot Food – An android application for Shiraz Univeristy students that make other students use Sms forgot food functionality to get food of other students which acts like a proxy for Sms.	3
2018	Main member of Special Tetris Game based on Words	3
2018	Creator of Persepolis Download Manager WebExtension Browsers Plugin	38
2017	Creator of Tapnesh – A Parallel image optimization wrapper in bash	11
2017	Main member of Persepolis Download Manager Team, built using Python and Qt	4321
2017	Creator of LightZoom – jQuery Magnifier Plugin Without Using Bigger Images	4
2017	Creator of Gnu/Sama – Browser plugin to auto vote professors assessment and generate weekly schedule program in Sama system (university manager).	15
2016	Creator of PastePreventer – A jQuery plugin which disable copy and pasting on all mobile devices (please note that disabling copy and pasting on touch devices is not as easy as disable context menus)	5
-	Few small contributions in some projects	
-	Leader of Linux users group in Ahwaz	

Mini Projects

Web Chat
A web based chat application using Adonis(node) as backend framework and Vue for front end development. Front end used REST and WebSocket for handling message, capable of caching messages when server is unavailable.

Vue admin panel
A UI only admin panel built with Vue + Vuetify as a free lancing project.

Crawled Data Aggregator	An Api build with Django to parse, mix and display the Json data that have been crawled from different shopping websites for a private company in Netherlands.
Ruby YT Video Downloader	Download Youtube videos from Urls in google searches results with logs for Parshan Company.1
Online Exam System	Online exam system to design questions and answers for courses, With scheduling, Enrolling in Exams with passwords, View result in both GUI and Excel and ...
Source Code Analyzer	Analyzes count of lines in programming projects
Razavi Theater Application	Introduction Android Application to show schedule program of Ahwaz Razavi Theater
Ashiyane Sql Inection2XSS	Small helper utility to convert SQL Injection vulnerability to XSS
-	Many more small projects that were created mostly for educational purposes in university.

Language Skills

English
Advanced
Persian
Native

Soft Skills

Team Work	Team working is a crucial part of any environment. I've been in several teams and always tried to do the things that the team needs by discussing. Some times I worked on things I didn't like only for the sake of the team.
Communication	IMHO, advanced communication is the ability that made humans different from other creatures. Without communications, we are just a PC without any outputs. I always keep communicating with my teammates to share and discuss solutions.
Teaching	Sharing knowledge is a duty every learner carries. I love this duty because it makes me see things from other's points of view.
Leadership	I've managed several small teams and was able to guide the team in the right

way. When needed, I always tried to be a leader than a manager and tried to guide and show the right of doing things for my teammates.

Problem Solving

Providing solutions (especially out of the box solutions!) are my specialty. I'm an enthusiast of simple or unusual solutions for complex challenges.

Decision Making

Although I always accept and look for trends, I always try to choose the best suitable tool for the work while having a big picture of the project road map.

Automation

As a human being, I believe repeating is what computers are made for. Even when writing code, my preferred principle is DRY (as long as it doesn't mess with other principles such as SOLID). Automating a task is my priority if I have to use it several times.

Hobbies

Watching Anime, riding motor cycles, open source contributions, monitoring Github trends, blogging, teaching, learning and swimming.