

Abolfazl Babamohammadi

Software and Infrastructure Engineer

Software and Infrastructure Engineer with 10+ years of experience designing, developing, and implementing software and infrastructure. In-depth knowledge of Python, Backend, Network, and Security.

Successfully managed and delivered 13 software projects and 20+ network and infrastructure services projects that meet business requirements and are aligned with industry standards.

WORK EXPERIENCE

Network And Infrastructure Engineer

Sep 2022 – Current

Self-Employee

- **Administrated** and **supported** the network and services of 4 organizations with over 500 endpoints and 60 services.
- Acted in 5 **emergencies** for different companies, such as cyberattacks or a data center crash, and focused on running services immediately before 48 hours.
- Consulted **backup** and **recovery** plans for disasters and helped some organizations in the recovery process.
- Deployed and configured open-source **firewall** on different points of network for 7+ organizations.
- Hardening services for 5 organizations including **Virtualization**, **Windows**, and **Cisco Networks** based on standards.
- Implemented VMware NSX **micro-segmentation** and **firewalls** that control all VM traffic and decreased malicious traffic by over 90%.

Network Security And Network Engineer

Jul 2013 – Aug 2022

FUM CERT

- Designed, configured, and secured networks and services for over 15 companies through projects like **redesigning** networks, **securing** networks, and **deploying** network services.
- Collaborated with the network **pentest** team for up to 8 projects as a pentester and also checked the configuration and design for security.
- Implemented **security services** based on **open-source** projects to decrease the cost of about 30% of the IT budget.
- **Trained** organizations' IT staff on **network security** and how to pentest our network and positively impacted over 300 persons in several organizations.

Full Stack Software Engineer

Feb 2021 – Current

Self-Employee

- Developed and implemented Python-based web applications powered by **Flask** and **Django** frameworks, resulting in a 40% reduction in manual data entry and a 30% increase in data accuracy.
- Combined **Restful API** and **MQTT** to increase communication performance between server and devices and decrease response time from 3sec to 1sec.

CONTACT

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SKILLS

- Cisco Network
- Mikrotik Network
- MS Active Directory
- Linux Administrator
- VMWare vSphere (Virtualization)
- vCenter & Esxi
- NSX
- Datacenter
- Storage SAN, NAS (EMC, HP)
- Firewall and IDS/IPS
- Network Security
- Pfsense, Suricata (Firewall, IDS)
- Nessus Vulnerability Scanner
- Pentest
- OWASP Top 10

- Python
- Flask (Flask RESTful)
- Django
- VueJs (Vuexy)
- Tailwinds
- NoSQL MongoDB
- MySQL, Postgresql
- Docker
- Micro-Service
- MQTT
- JWT

Tools:

- Linux
- MacOS
- Pycharm
- Visual Studio Code
- Git

Languages:

- English
- Persian

- Revamped data structure and implemented **NoSQL** database, resulting in a 25% increase in read and write performance, optimizing data retrieval and storage efficiency.
- Created financial software for a company with over 1700 users which operated with both software and hardware to pay for the organization's services.
- Affected 4 projects with Vue.js and Tailwinds CSS.
- Familiar with infrastructure services like **Docker**, **Kubernetes**, and **DevOps** cycle.

Software Engineer

Mar 2018 – Jan 2021

Samen Research Institute

- **Analyzed** solutions and **design systems** for 4 projects.
- Developed an application to encrypt and play encrypted video on clients' computers that was used over 100,000 times.
- Trained and **coached** a team of 8 personnel and encouraged individuals to share performance recommendations.
- Applied **security** measures into systems development, training developers to pay attention to **OWASP Top 10** and **ASVS**.
- Researched the **Single sign-on (SSO)** system, deployed, and customized Keycloak, and also used **OpenIDConnect** and **JWT** for AAA.

C# Developer

Apr 2011 – Apr 2012

Siba Naghsh Toos

- Worked closely with systems analysts, and engineers and developed "Gas Calc Application".
- Programmed **GIS-based applications** for the first time and got data from ArcGIS application files via components in **C#**.

EDUCATION

Imam Reza University

Master of Science

Information Security Engineering
Sep 2017

Thesis: Smart Phone Honeypot System

Islamic Azad University of Mashhad

Bachelor of Science

Software Engineering
Feb 2014

Thesis: Implement Simple IDS with C# for analysis packet.

Some Software Developed Projects

Credit systems for sports places

I wrote and handled this project's software since it includes both hardware and software. In this project, I used Python, Qt, and Vuejs to build a client-side device, backend, and frontend. MQTT and RestApi are used to communicate between the device and the backend. The client device app is implemented on a Raspberry Pi with an LCD and RFID reader.

Online Answer Hospital's Lab (For Nazeran Hospital Mashhad)

I designed and was responsible for the hospital laboratory application. I wrote this application with Django and Postgresql and I use Tailwind CSS for the website interface. Also to connect to the HIS database I wrote a Windows application to show and convert data for the website that connects to the website with API.

Beekeepers' information system (For Khorasan Razavi Agricultural Organization)

This web application is based on GIS data that I created with Python, Flask as a backend and MongoDB for storing geo data.

Smart environmental protection system (For Khorasan Razavi Water Organization)

Designed and developed a new idea for a smart physical security system. I wrote this whole application which is powered by Python, flask, MongoDB, MQTT technology on the backend, and VueJS on the front end. The hardware devices in this project were created by coworkers.