

Mahyar Karimi

Technical Software Lead, Full-Stack Developer

✉ mahyarkarimi@rocketmail.com 📍 Tehran, Iran 🌐 github in LinkedIn 📅 17th July 1996

👤 Profile

Experienced software engineer with 5+ years of expertise in full-stack development. Proficient and experienced in full-stack development using **Javascript**, **Python** and **Java**.

Enthusiast in software architecture and microservices architecture specialist.

📁 Professional Experience

Mofid Securities (Finance service corporation) 🔗

Software Technical Lead

June 2023 – present | Tehran, Iran

Management of the technical aspects of the Mofid Commercial Chat team and coordination of the project deliverables including:

- Contributing to launch of 2 MVPs in 3 months with successful outcome
- Development of analytical dashboards in context of customer related KPIs
- Design and development of automated AI based outgoing call
- Mofid Chatbot widget UI enhancements and redesign

Tech Stack: Python, FastAPI, ReactJS, TS/JS, Golang, MongoDB, Postgres, Microservices, Websockets, SIP & RTP protocols

Full-Stack Developer

May 2021 – June 2023 | Tehran, Iran

Launching the chatbot and QA platforms of Mofid Securities commercial using mainly **Typescript** and **Python** achieving:

- More than 200 personnel and our AI "chatbot" in 11 departments communicate over the chat platform to millions of users resulting in more than 80% improvement in response time.
- Full-stack development of an Omnichannel-based chat platform used in 24 web and mobile apps with an average of 4k chats/day.
- Optimizing multiple API responses time by 20%.
- Quickened DB queries by 10x with indexing.
- Development of a QA platform pipeline processing approximately 8k call sessions daily in 5 separate ai feature extraction stages.
- Raising customer satisfaction rate with QA platform product as a full-stack developer.
- Refining APIs and project structure according to best practices.
- Write Kubernetes manifests (95% uptime SLA) and optimized docker file deployments.

Build up web client for Mofid STT service.

Tech stack: Microservices, Flask, RabbitMQ, Postgres, Mongo, MeteorJS, ReactJS, Kubernetes, Docker

Behestan Rayan Hamrah, *Software Engineer*

January 2023 – June 2023 | Tehran, Iran

Short time contact-based position achieving following tasks:

- Increased scalability, extensibility, observability, and requests capacity by 5x with consideration of resource utilization.
- Redesign system architecture
- Deployment using Docker Swarm cluster and cut down manual deployment efforts by 80%.
- Infrastructure and server tweaks and hardenings

Tech stack: MongoDB, ExpressJS, ReactJS, Docker, Grafana, Prometheus, ELK, MinIO, ModSecurity

PIC Sepehr, *Full-Stack Developer*

February 2019 – May 2021 | Tehran, Iran

Project management of a small team of 6 developers.

- Achieved development of multiple web applications with 7 key features all related to online healthcare systems including online appointment reservations.
- Crawled about 350000 web pages using selenium and scrapy

Trigup, *Android Application Developer*

August 2018 – November 2019 | Tehran, Iran

Achieved development of 5 Android applications in 3 different projects related to car maintenance services and accessibility helper application for disabled people.

Tech stack: Java with following principles and patterns MVP, MVVM, Data Bindings, NavigationUI framework

Education

MSc. Computer Engineering,

August 2018 – February 2022 | Tehran, Iran

Amirkabir University of Technology (Tehran Polytechnic) 

Thesis Title: Proposing an Executive Orchestration Model for Microservices Architecture-Based Systems

Supervisor: Prof. Ahmad Abdollahzadeh Barforoush

Resulting in an architectural framework for large-scale software orchestration using a structured BPMN workflow engine to enhance dynamicity.

BSc. Computer Engineering, *University of Tehran*

August 2014 – June 2018 | Tehran, Iran

Project Title: Design & Implementation of Realtime Social Media - resulting in the development of a platform regarding the asynchronous flow of data in one way from server to clients using Java Spring and Android app development.

Skills

Proficient

- Javascript & Typescript
- Python - Flask
- NestJS - ExpressJS
- ReactJS - NextJS
- MongoDB - PostgreSQL

Have Experience

- Java
- FastAPI
- Android Development
- Spring - Hibernate
- Docker

Have Knowledge

- Kubernetes
- Sci-Py - Numpy - Scikit-learn
- RabbitMQ - Kafka
- ReactiveX
- ELK & Monitoring Tools

Freelance Projects

Alef-Pe (app.alefpe.ir),

October 2022 – December 2023

Children's growth assessment and monitoring program

Extensive academic efforts have been dedicated to child assessment and evaluation by the Modares Institute of Childhood Studies, and Alefyek Institution. Alefpe is the product of these efforts with the cooperation of a small team of developers.

Publications


Proposing a Dynamic Executive Microservices Architecture


3rd August 2022

Model for AI Systems, *published draft version at arXiv.org* 

Access published link at arXive: <http://arxiv.org/abs/2308.05833>

Personal Open Source Projects & Contributions

Rocket.Chat, *Contributed and accepted pull requests to the project source code* 

React Tabler Components, *Developed ReactJS customizable component library based on tabler.io* 

Python-RMI, *Simple Java RMI implementaion in Python* 

FFMPEG Microservice, *Serve ffmpeg as a microservice implemented in Python FastAPI* 