

ARSHIA AKHAVAN

Undergraduate Student of Computer Engineering

✉ letmemakenewone@gmail.com ☎ +98 933 457 4957 📍 Tehran, Iran
in arshia-akhavan 🌐 ArshiAAkhavan



PROFESSIONAL EXPERIENCE

Software Engineer

Sotoon

📅 Jan 2023 – Currently

📍 Tehran, Iran

Sotoon is a B2B cloud provider which focuses on different aspects of Cloud Computing, such as hardware abstraction, Providing storage servers, DNS, CDN, Bigdata solution and managed k8s cluster. I worked in the K8s as a Service team.

Experiences:

- Using **SIGS/Cluster-api** to provide bootstrapping and operations as a service for k8s.
- Develop and Maintain SotoonCSI, a **CSI implementation** that integrates with Sotoon's storage backend.
- Develop **node-AutoScaler** for k8s cluster which integrates with Sotoon's Computation backend to reduce customers' costs.
- Develop and maintain a **CCM** module to provide loadbalancers for k8s clusters using sotoon's compute infrastructure.
- Provide additional cluster plugins such as **DNS** and **CNI** as an automated solution.
- Plan and Lead **Migration** of **over 100 customers'** k8s-clusters to the new infrastructure with **zero downtime**.

Data Platform Engineer

Digikala

📅 Aug 2021 – Jan 2023

📍 Tehran, Iran

Digikala is the largest e-commerce company in Iran with 40+ million users. As a member of the Bigdata & AI team, my job is to provide the necessary infrastructure needed to store and process the data accumulated from the users.

Experiences:

- Developing **Karavan**, a **Parallel Processing Engine** for data pipelines on top of **Apache Spark**.
- **Reducing Computation time** of our Pipelines by **revising our data retrieval models and Queries**.
- **Reducing latency** of our API by locating **critical paths** in the codebase of the framework and **optimizing** them.
- Using **K8s** as the main orchestrator with **Ceph** as our storage backend; provided a variety of tools for the DS/DE team to work with, including **Airflow** as our job scheduler and **Spark** as our main batch/stream processor and pipeline engine.
- maintain **Kafka** cluster as a Sync and **Debezium** to sync external Databases to it.
- Manage the platform's infrastructure based on **GitOps** protocols using **argoCD**. Automate deployment of our APIs using ArgoCD with **Kustomize** and **Helm charts**.
- Deploy and maintain a staging environment and build a framework for our Data Science team to better interact with our infrastructure.

DevOps Engineer

Tapsell

📅 Nov 2019 – Aug 2021

📍 Tehran, Iran

Providing the infrastructure needed by other technical teams in the corporation.

Experiences:

- Managing and automating deployment procedures of databases such as **MongoDB**, **Cassandra**, and **ElasticSearch** with **Ansible**
- Optimizing Cassandra's **Disk usage** for different workloads
- Developing a fully automated backup, validity check, and restore tool for managing our backups in a cloud native infrastructure.
- Deploy and maintain a fully functional staging cluster using **k8s** as its main orchestrator.
- Develop CI/CD flows for our company using **GitlabCI**.
- Working with **Terraform** to automate deploying our infrastructure on **VMWare**.
- Administrating Linux-based virtual machines and addressing network issues and bottlenecks and improving our overall performance based on it.

SecOps Engineer

Amnban Gostar Sharif

Aug 2019 - Nov 2019

Tehran, Iran

Starting my career as a SecOps intern in this company and learned the basic concepts of network security and penetration-testing.

VOLUNTEER EXPERIENCE

Technical Chapter

Student's Scientific Chapter (SSC)

Aug 2020 - Aug 2021

Tehran, Iran

Maintain Technical resources owned by SSC and supervise technical requirements of events held by SSC

Chief of Infrastructure and System Team

Sharif AI Challenge 2021

Dec 2020 - May 2021

Tehran, Iran

Develop and deploy a scalable infrastructure/software for AI challenge's high demanding game engine. [GitHub](#)

Chief Technical Staff

ICPC

May 2023

Tehran, Iran

Build contest-customized OS images and distribute them on contestant hosts using Network boot.

Manage and configure hosts used by contestants and monitor their connectivity.

Restrict external access and host to host access of each contestant's host device.

Chief Technical Staff

ICPC west championship

Dec 2019

Tehran, Iran

Manage and configure hosts used by contestants and monitor their connectivity

PROGRAMMING LANGUAGES

Rust

Go

C

Bash

Python

Java

SQL



TECHNOLOGIES

AVX

Cuda

OpenMP

rayon-rs

crossbeam-rs

k8s

Docker

Docker-swarm

Nginx

HAproxy

GitlabCI

ArgoCD

Spark

Airflow

Ceph

minIO

Kafka

Redis

Cassandra

MongoDB

Ansible

terraform

LANGUAGES

English



French



Persian



EDUCATION

B.Sc. in Computer Engineering

Sharif University of Technology

Sep 2018 - Apr 2024

Mathematics and Physics Diploma

Helli High-school (Sampad)

Sep 2010 - Jul 2018