Amir Allahveran

Calgary, Alberta, Canada · amir79allahvern@gmail.com · amirallahveran.github.io

Work Experience

ArvanCloud   Tehran, Iran
Site Reliability Engineer   Aug 2022 - Aug 2023

- Write, maintain, and optimize Ansible playbooks to automate routine system configuration tasks
- Regularly performed maintenance and updates of Kubernetes clusters to ensure optimal performance and security
- Developing and managing Ingress configurations with tools such as Ingress-Nginx
- Implementing multi-tenancy solutions with Capsule
- Creating and enforcing policies with Kyverno
- Set up and administered a Nexus Repository Manager to act as a mirror registry for multiple programming languages and tools
- Developed and implemented efficient scripts using Golang to automate routine system administration tasks, enhancing the reliability and performance of our infrastructure

Tapsell   Tehran, Iran
DevOps Engineer   Sep 2021 - Aug 2022

- Designed and implemented robust Kubernetes Operators using Golang and Kubebuilder
- Engineered, implemented, and managed continuous integration and deployment pipelines using GitLab CI/CD, contributing to more efficient and reliable software delivery
- Developed and implemented efficient scripts using Golang to automate routine system administration tasks, enhancing the reliability and performance of our infrastructure
- Write, maintain, and optimize Ansible playbooks to automate routine system configuration tasks
- Responsible for the installation and configuration of various database systems, including SQL and NoSQL databases

Skills

Scripting Languages:	Golang, Python, Bash
Monitoring Tools:	Prometheus, Grafana, AlertManager, ELK Stack, VictoriaMetrics
Cloud Management Tools:	Kubernetes, Docker, Kubebuilder, Helm, Ingress-Nginx, Capsule, Kyverno
System Administration:	Linux LPIC-1
CI/CD Tools:	GitLab CI/CD, GitHub Actions
Configuration Management:	Ansible
Knowledge of Networking:	TCP/IP, UDP, ICMP, DNS, MAC addresses, load balancing(HAProxy)
Database Management:	PostgreSQL, MongoDB, Redis

Projects

HDFS K8S Operator *Golang, Kubernetes, KubeBuilder*
[HDFS Operator Repository, HDFS Kubectl Plugin Repository, HDFS Components Dockerize Repository]
Our problem was to design and implement a Kubernetes HDFS Operator capable of automating the process of creating, updating, and deleting HDFS clusters within a Kubernetes environment. This operator must ensure that the HDFS clusters are efficiently managed, highly available, and recoverable from failures while respecting resource constraints within the Kubernetes ecosystem.

DNS Query Tool *Python*
[DNS Query Tool Repository]
The tool is built using Python's socket module to generate and send custom DNS request packets over UDP. It constructs a DNS message from scratch, including sections such as the header, question, and resource records. It then sends the message to a specified DNS server and listens for the response

S3 Bucket Management Utility *Golang*
[Delete S3 Objects Repository, S3 Copy Repository]
One of the primary functionalities of this utility is the ability to delete an object from an S3 bucket. The application also facilitates the copying of items from one S3 bucket to another.

Education

University of Calgary	Calgary, Alberta, Canada
M.Sc. Computer Science	Aug 2023 - Present
Amirkabir University of Technology	Tehran, Iran
B.Sc Computer Engineering *GPA: 3.8*	Sep 2018 - Jul 2023

Languages

English: Fluent (TOEFL iBT Score: 97 [Reading: 30, Listening: 24, Speaking: 22, Writing: 21])
Persian: Native language