PERSONAL INFORMATION

Mohammad Yosefpor

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WORK EXPERIENCE

Apr 2024 - Now



Principal Engineer at Sotoon Cloud

- Contributed to the strategical roadmaps and architectural designs of scalable, high-performance cloud solutions for Sotoon Cloud, a public Cloud Company which provides laaS, KaaS, PaaS, DBaaS, CDN, DNS, etc.
- Collaborated with senior leadership to align engineering initiatives with business objectives.
- Architected and implemented an advanced access management system for servers, VMs, and control panels, utilizing WireGuard, IAM, and reverse tunnel with ZTNA architecture.
- Spearhead the company-wide security strategy, establishing metrics, KPIs, scoring mechanisms, and actionable plans for ongoing security enhancement.

Nov 2021 - Apr 2024



Cloud Tech Lead at Snapp

- Design, implementation, and fine-tuning a new PaaS platform based on K8s, OKD, Ceph, Openstack and many other CNCF tools in multiple regions and Datacenters. Also maintaining, improving and upgrading production PaaS, laaS and Storage on-prem platforms for SnappGroup (Cab, Box, Doctor).
- Developing multiple plugins and projects for CNCF projects, and developing many **k8s operators** and **k8s controllers** using Golang.
- Forking and maintaining a modified version of multiple open-source projects (CSI controllers and drivers, coredns, argocd, contour ingress controller,...) to customize it for our needs and integrate it with other internal components.
- Developing a query based authN and authZ system with **golang** for multi-tenant access of different components with a centralized access control.
- Code review and providing solutions design for different developed components.
- · Pairing with and mentoring cloud engineers.

Mar 2020 - Nov 2021



Senior Cloud Engineer at Snapp

- Developing Golang apps including operators and k8s controllers with operator-sdk, controllerruntime and kubebuilder, custom prometheus exporters with prometheus-sdk, other custom plugins and extensions for other CNCF projects and developing specific new components for cloud platforms.
- Designing Cluster Mesh networking with Cilium for multi-DC networking.
- Research, deploy, and fine-tuning of different services on kubernetes including different operators
 on kuberenete, argo stack (argoCD, argo-rollouts, argo-workflow), thanos, prometheus, loki,
 elk, certmanager, consul, kyverno and many more CNCF projects.
- Changing **CNI** plugin of OKD clusters without down time from openshift-sdn to **openshift-ovn** and later from openshift-ovn to **Cilium**.
- Implemented and managed Cinder-CSI and Ceph-CSI in multiple clusters, and also providing and implementing a solution for the migration of volumes between different OpenStack clusters and transitioning volumes from Cinder CSI to Ceph CSI.
- Upgrading k8s clusters in production without downtime.
- Practicing serious Infra as Code (IaC): Writing HCL (Terraform code) for provisioning and Ansible playbooks/roles for configuration, Helm charts.
- Creating CICD pipelines with **Gitlab-ci** and **ArgoCD** for our IaC to: validate, lint, build, unit-test, integration-test, dry-run and deploy.
- Participating in a 24/7 On-Call rotation for high load production cloud servers maintenance.

Jun 2021 - Oct 2022



DevOps Consultant at SnappDoctor

- Dockerizing services for k8s and migrating the production services from VM to k8s.
- Creating and designing Infrastructure as Code (IaC) for provisioning VMs on Openstack and **Ansible** playbooks/roles for configuration, and **HeIm** charts for k8s apps.
- Designing and creating a fully automated CICD pipelines with Gitlab-ci and ArgoCD.
- Designing and deploying monitoring and alerting structure for services, and log forwarding solution to a central **Loki** stack.
- Providing documentations and easy workflow for developers to have self-service multi-tenant experience.

Feb 2020 - Apr 2020

DevOps Engineer at Hasin Cloud



Provisioning, Configuring, Deployment and maintenance of different services such as:

- HA Kubernetes cluster by Kubespray.
- Calico for east-west and ingress-nginx controller for north-south traffic.
- Providing StorageClass with Rook-Ceph operator.
- Monitoring and alerting with Prometheus and Grafana.
- Regular Tasks: Automation with bash and ansible playbooks/roles. creating technical docs.

Oct 2019 - Feb 2020

DevOps/SRE at SINA Innovative Communications System



Provisioning, Configuring, Deployment and maintenance of different services such as:

- IMS containerized microservices stack on top of a HA **DockerSwarm** cluster.
- Configuration and deployment of CoreDNS as a DNS server and also for service discovery.
- Providing Monitoring stack with **Prometheus** and **Grafana**.
- EFK stack (Elasticsearch, Fluentd and Kibana) for log aggregation.
- Nginx as a reverse-proxy for caching, load balancing, and encryption (TLS).
- CI/CD pipline using **Jenkins** with poll SCM trigger to build, test and deploy the software.
- Regular Tasks: Automation with bash and ansible playbooks/roles. creating technical docs.

Jul 2017 - Oct 2019



Software Engineer at BehCloud

- Providing VM and hosting service.
- Providing devops tools as a service (gitlab, rocketchat, email, ldap, ...).

Jun 2016 - Sep 2016

Intern at Institute for Research in Fundamental Sciences (IPM)



• Working in ILSF-Group which is one of the largest scientific projects in the history of Iran.

EDUCATION

2018 - 2020

M.Sc. in Physics - Quantum Computer Science



Sharif University of Technology, Tehran.

GPA: 4.0/4.0

Thesis: Quantum Entanglement Detection using Machine Learning

2013 – 2018

B.Sc. in Electrical Engineering and B.Sc. in Physics (Dual Deree)

Khaje Nasir Toosi University, Tehran.

Physics GPA: 4.0/4.0

Electrical Engineering GPA: 3.9/4.0

Programming

- Experienced in **Golang**: Proficient in using various libraries and frameworks, including **Operator-SDK**, **Kubebuilder**, **controller-runtime**, **gRPC**, **Prometheus-SDK**, **BDD(gingko**, **gomega)**, web(**echo**, **fiber**, **gin**), **terratest** and others.
- Experienced in **Python**
- Experienced in Bash scripting
- DS and Algorithms as demonstrated in ICPC-ACM and CodeCup Competitions.

Linux & Network

- Over 8 years experience in **Linux** (Completed **LPIC3 304** course)
- Deep understanding of TCP/IP and TLS (Completed CCIE routing and switching course)

Soft Skills

- Strategic Planning and Team Collaboration: Conducting thorough research to identify key ideas for achieving organizational goals. Evaluating alternatives, working closely with team members to create a detailed roadmap. Fostering a cooperative team environment by providing mentorship, encouraging open communication, and actively involving all members in the plannings.
- Effective Communication and Problem Solving: Communicating issues to users and stakeholders clearly. Demonstrating problem-solving skills by troubleshooting, and tracing issues to root causes. Formulating immediate and long-term solutions in detailed RCA reports.

NOTABLE TOOLS

Highly skilled at

Besides extensive production experience handling high loads and optimizing for scale, I possess a deep understanding of exact internal workflows, have contributed to and forked their components, and have solid knowledge of their codebases:

Experienced in

Extensive production experience in managing high loads and tuning for scalability, ensuring robust and efficient performance:

Terraform, Docker, HAProxy, Envoy, Cilium, Multus, Ansible, Prometheus, Runc, Kyverno, Etcd, Gitlab-ci, Helm, Metallb, Thanos, Grafana, Loki, ELK, Ceph, Rook, Dnsmasq, Fluentd Telegraf, KVM-QEMU, Copenstack (Nova, Cinder, Glance, keystone, Ironic,...), Nginx, keepalived, FCOS-Ignition, Harbor, Containers (podman-buildah-skopeo), Cert-manager, KeyCloak, Dex, Consul

Good Familiarity with

I understand the concepts, have researched them, and conducted testing in staging and proof-of-concept environments:

▲Istio, *Dragonfly, ♥OPA, ≸Jaeger, Packer, &Calico, ⊗SaltStack, ⊗Kubevirt, and more.

SELECTED OSS CONTRIBUTIONS



Authored and contributed to many repos on snapp-cab org, including numerous **operators** and **kubernetes controllers**, **coredns plugins**, **k8s webhooks**, etc: view link

Other Notables

Also you can view some of my contributions to other notable OSS projects including **openshift**, **ansible**, **argocd**, **coredns**, etc: view link

PUBLICATIONS

IOP Science

Finding semi-optimal measurements for entanglement detection using autoencoder neural networks, M. Yosefpor, M. Mostaan, S. Raeisi. Quantum Science and Technology, vol. 5 no. 4.

ADDITIONAL INFO

Languages

Full proficiency in English, Native in Persian

On-call 24/7

Ready for being oncall