# **BALAJI SIGAMANI**

(91) 6380610508 . sabalaji09@gmail.com . Linkedin . Github . Portfolio . Bangalore, India

#### **SKILLS**

**Programming** Golang, Python **Tools** Docker, Kubernetes, Terraform, Prometheus

Operating System Linux, Windows CI/CD ArgoCD, Ansible, Gitlab CI, Jenkins

Cloud Amazon Web Services Misc Networking, Security

# **EXPERIENCE**

Ola Cabs June 2022 - Present

# Software Development Engineer

Bangalore, India

- Developed an internal developer portal in Go as a Kubernetes-native application by utilizing operators. This
  facilitated the developers to manage all aspects of their application from migration, deployment to logging and
  monitoring.
- Integrated a CNI plugin for network security within the Kubernetes cluster to ensure PCI DSS compliance audit by RBI. The solution was performance-tested using the Locust benchmark tool, handling 2 million rpm.
- Designed and executed a migration plan for the Aerospike database cluster in production from Azure to AWS, leveraging XDR replication. Infrastructure backup, restore, and node configuration were automated through Terraform scripts and Ansible playbooks, resulting in minimal downtime.
- Authored Prometheus exporters and configured Prometheus to scrape metrics from microservices. Integrated alert manager to send alerts via PagerDuty, while Grafana was used to visualize the metrics.

Trimble Inc
Associate Site Reliability Engineer

July 2021 - May 2022 Chennai, India

- Developed a state machine with aws lambda functions to automate software patches for more than 100 nodes in AWS that takes backup of machines as AMIs, delete old AMIs, initiate OS patches and notify stakeholders via email using SES service, incase of issues. This project reduced the manual hours and cost drastically.
- Proposed and Implemented security testing via ui automation using zed attack proxy tool to report application vulnerabilities and educated developers about OWASP top 10 vulnerabilities, to handle cyberattack incidents.
- Setup Cloudwatch agents in EC2 machines and created alarms in aws to monitor and alert on cpu, memory, disk and network saturation, which helped in troubleshooting production issues.

Trimble Inc Jan 2021 - June 2021 Graduate Technical Intern Chennai, India

- Wrote a single E2E test framework for web, Android and IOS Applications, helped in syncing test cases across multiple types of devices, which made cross platform automation testing simpler and easier.
- Facilitated reduction in infrastructure cost by eliminating and optimizing workloads in AWS, by identifying underutilized and unused components on cloud.

# **OPEN SOURCE CONTRIBUTIONS**

- argo cd <a href="https://github.com/argoproj/argo-cd/pull/11096">https://github.com/argoproj/argo-cd/pull/11096</a>
- aws-vpc-cni https://github.com/aws/amazon-vpc-cni-k8s/pull/2192

#### **PUBLICATIONS**

- IEEE publication Web Application Firewall Evasion Techniques https://ieeexplore.ieee.org/document/9074217
- Scopus Sniffing HTTPS traffic in LAN with ARP https://acadpubl.eu/hub/2018-119-12/articles/7/1671.pdf

#### LICENSES AND CERTIFICATIONS

- AWS Certified Sysops Administrator Associate
- · Gremlin Chaos Engineering Professional

# **EDUCATION**