

## EDUCATION

- **Masters in Computer Science** from *Texas A & M University*
- **Bachelors in Computer Science & Engineering** from *Gujarat Technological University*

## TECHNICAL SKILLS

- Golang, Python, JavaScript
- PostgreSQL, MySQL, Elasticsearch
- AWS, Docker, Kubernetes, Terraform, gRPC, Protocol Buffers, Kafka, DataDog, Redis, Memcached, Logstash, Kibana, ArgoCD, Prometheus, Helm

## WORK EXPERIENCE

### **Software Development Engineer I | Coalition, Inc., Remote, USA.**

**(May 2021 - Present)**

- Revamp our infrastructure to improve developer experience, runtime reliability, automation, and monolith to service-oriented architecture transition as well as includes migrating to Kubernetes, auto-remediation system, multi-region service deployments, supporting multiple repositories.
- Project: **Coalition Webhooks**
  - Led the research and design for the "brain" of our event-driven system of automated notifications which informs about the complex lifecycle state change and important updates on the quote, and policy.
  - Set the architecture and best practices for the implementation with Golang, gRPC, and Kafka, led engineering-wide demo, retro, and feedback sessions, and aligned internal and relevant external product teams on solutions to address risks.
  - Adopted developer and product friendly documentation which has made the broker partner integration easy and helped increase the revenue by 160%.

### **Software Engineer | Critical Start, Inc., Plano, TX.**

**(July 2018 – May 2021)**

- Lead the industry's only MOBILESOC implementation with Flutter that lets enterprise customers interact with Critical Start's Security Operation Center team without being threatened by their desktops.
- Set the vision for how to migrate from a rule-based system to an AI/ML based classification by designing machine learning Random Forest classification models, which gave the likelihood of incoming security events with different security events' levels to reduce investigation time up to 20% in Zero Trust Analytics Engine.
- Drove the design, maintenance, and monitoring of RESTful APIs, AWS infrastructure, and Elasticsearch Clusters to improve availability and scalability.

## OTHER PROJECTS

### **Continuous Delivery in Kubernetes EKS from Slack using ArgoCD**

- Designed in-house slack-bot tool called "deployer" and a git-ops tool "ArgoCD" to perform deployments and continuously deliver software updates at Coalition, Inc.
- When a user utilizes deployer in slack to initiate a deployment to an environment of choice, the deployer updates the appropriate files for helm-charts hosted on GitHub for the service to the latest image tag.
- ArgoCD watches for any changes made to the helm-charts and deploys the latest image to EKS in the correct cluster with the latest configuration.

### **Auto-Remediation System for Reduced On-calls**

- Implemented a runtime component that detects commonly occurring problems in production and automatically applies known remediations to help reduce on-call alerts.
- A Kubernetes service running multiple replicas of go binary running inside docker containers and exposing metrics endpoint for scraping by prometheus.
- The application constantly scans and fixes known problems such as pods in crash-loop, pod flapping, nodes going not-ready, and REST/gRPC health checks, etc.
- Emits metrics of various cluster conditions to help generate alerts for conditions that cannot be auto-remediated.