

LUAN NGO MINH

Senior Site Reliability Engineer

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SUMMARY

- 6+ years experience in DevOps and SRE
- Experience in build and maintain large and highload system
- Experience in build Big Data system, and micro service up to 300 microservices
- Experience in custom open source to build internal system serve internal user
- Strong in Golang, CI/CD, Linux, AWS, GCP, Container, Kubernetes, Big Data

TECHNICAL SKILLS

- **Languages:** Golang, Python
- **Source control system:** Git
- **Database:** Postgres, MySQL, Redis, Cassandra, Scylla
- **Automation/Build tools:** Docker/Containerd, Kaniko, Jenkins, GitlabCI, Github Action, DroneCI, Ansible, Terraform, Terragrunt,, Cloud Formation
- **Cloud:** Amazon Web Service, Google Cloud Platform, Huawei Cloud
- **Platforms:** Linux and Unix
- **Monitoring:** Prometheus stack, Victoria Metrics, Grafana, Datadog
- **Logging:** EFK, Loki
- **Secret management:** Vault
- **Service discovery:** Consul
- **Message queue and streaming:** Kafka, NATS, RabbitMQ
- **Container orchestration:** Kubernetes, GitOps, Kustomize, Helm
- **GitOps:** FluxCD, ArgoCD
- **Proxy and Service Mesh:** Nginx, HA proxy, Kong, Traefik, Istio, Linkerd
- **Big Data:** Hadoop, Yarn, Airflow, Spark, Presto, ClickHouse, Jupyter
- **Storage:** Ceph, Minio
- **Incident management:** OpsGenie, PagerDuty

EDUCATION

2015 - 2019 Computer Systems Networking
and Telecommunications -
Ho Chi Minh University of Science

WORKING EXPERIENCE

Jun 2022 - Present

Data Architect

[Amili](#)

- Main responsibility is working with CTO and head of data to build a big data system support for biotechnology, specifically is for gut microbiome
- Cooperate with lab, research and data lake team in 4 countries
- Working in data lake team, build new big data system on AWS for process mRNA data of bacteria and store in data lake
- Convert ETL job from Trino into new flow using AWS Glue and Airflow
- Understanding microbiome data and working with data engineer use 16S sequencing technique to analyze gut bacteria, it's speed up 30% of ETL time
- Build data warehouse, data lake, ETL job based on AWS
- Build solution to share data with external researcher, ensure about data security and privacy, make sure data will not transfer out Amili data lake system
- Build internal LLM service supporting for researcher, the purpose of this is some researcher would like to send data into OpenAI but cause the privacy, it is not allowed
- Work with cloud security teams apply zero trust solution for whole system
- Analyze and optimize data lake cloud cost
- Work with external software teams build product which using data lake output
- Unique infras as code solution for whole system, supporting multiple region, multiple account and multiple environment

Jan 2021 - May 2022

Senior Site Reliability Engineer

[Chotot](#)

- Working with infrastructure of Chotot, Mudah and Carousel on GCP, AWS and on on premise data center
- Deploy and manage Kubernetes cluster with more than 20 nodes, 200 microservice and cronjob, almost 3000 pods, handle 300 millions request per month
- Cloud architect for Chotot and Mudah the purpose of this is try to merge cloud infras of two company together
- Define Infrastructure as code framework use for both Chotot and Mudah, working on two cloud GCP and AWS
- Working on cloud migration project, migrate about 200 micro service, more than 30 database, cache, message queue running on Viet Nam datacenter to Google Cloud Platform
- Build chat platform for Chotot, Mudah and Carousell. Its support Carousel replaced Twilio chat, cutting a lot of cost for chat.
- Working with PO and other teams define SLI and SLO
- Define incident management process, setup incident management, and participate in on call process

- Develop developer portal, this portal handling CI/CD instead of using Github action or Travis CI. It's also a GitOps tool like ArgoCD, which manages and deploys resources on Kubernetes.
- Standardized CI/CD flow and build new CI/CD system for Chotot and Mudah, developer portal is a part of this phase
- Develop a tool to auto generate version based on business requirements from Head of Tech
- Build secret management system for Chotot and Mudah
- Troubleshoot and analyze database performance
- Develop incident management tool, it's like Opsgenie but more simpler
- Work with security team apply zero trust solution for Chotot and Carousell
- Consultant and work with data team build data warehouse, data processing pipeline
- Consultant and support software team examine and choosing technical stack for new services
- Work with Mudah SRE apply GitOps for Ansible, application configuration, Terraform
- Work with Mudah SRE build new monitoring solution for Chotot and Mudah, it's can store and query monitor data within 3 years
- Consult technical solution for Engineer Manager and Head of Tech
- Examine and optimize cloud cost
- Recruit and training new members

Mar 2020 - Jan 2021

DevOps Engineer

[Vexere](#)

- Responsibility for product reliability
- Build and maintain monitoring system, it support query data within 2 years
- Build and maintain logging system, store logs in 1 years for audit and debug
- Automation provision AWS, GCP resource with Terraform, apply CI/CD for Terraform code
- Apply infrastructure as code for Cloudflare config
- Automation configuration server with Ansible, make sure all component in the system have to have automation
- Optimize, build new CI/CD flow and build an CI/CD framework
- Develop some tool for optimize cost for testing and UAT environment
- Build an secret management system and define a flow to apply to running services
- Consultant for Data Team, build data processing and BI system
- Propose API Gateway solution, presents with technical architect team, protect solution and apply this solution for production environment
- Propose GitOps solution, presents with technical architect and apply this solution for production environment

Feb 2019 - Mar 2020

Associate System Engineer

[VNG](#)

- Build data platform, total storage is more than 2 PB, each day process about 500 GB data
- Deploy and maintain bare metal Kubernetes 16 nodes about 500 cpus and 1 TB memory with more than 700 pods
- Deploy and maintain Prometheus with Consul as service discovery
- Design Grafana dashboard, write PromQL to query and visualize for all service
- Deploy and maintain ELK cluster with monthly data input more than 200 GB
- Observe, weekly review monitoring metrics whole server
- Observe, audit log in system, detect unusual events
- Deploy and maintain databases as a service: Postgres, MySQL, Redis,...
- Build and optimize docker images for software in platform
- Deploy and maintain: Hadoop, Yarn, Airflow, Zeppelin, Jupyter, Metabase, Presto, Kafka,...
- Maintain Ceph cluster
- Deploy application on Kubernetes with GitOps
- Develop new data processing solutions for data teams such as Spark streaming consume from Kafka. Use Delta lake and S3 to replace Hadoop.
- Working with data team makes sure data comes to Hadoop enough and in time
- Work with product team determine SLI and define SLO for services in whole system: four gold signal, SLA chart, alerting when miss SLA

Jan 2018 - Jan 2019

Devops Engineer

[Dwarves Foundation](#)

- Responsible for construct CI/CD system
- Deploy and monitor application system
- Develop backend for product
- Deploy and maintain resources on customer cloud (AWS and GCP)
- Deploy and maintain bare metal Kubernetes
- Construct CI/CD system for application, apply canary and blue green deployment
- Deploy and maintain Gitlab, MySQL, Proxy
- Design and implement monitor as a service system
- Monitor infrastructure with Prometheus, Grafana
- Write IaaS for AWS resource, deploy and maintain AWS resource