Richard Bina Jadi Simanjuntak

DevOps Engineer

Bandung,Indonesia | +62 8227 2152 660 | simanjuntakrichard17@gmail.com

Github: richardsmnjtk | Linkedin: in/richardsmnjtk

SUMMARY

Telecommunication Engineering student who is passionate about DevOps Engineer. Experienced using multiple cloud platforms such as Amazon Web Service, Microsoft Azure, and Google Cloud Platform to perform simple web deployments. Hands-on experience using tools like Jenkins, Grafana-Prometheus, and EFK stack. Love to design, implement cloud applications and migrate existing on-premises applications to the cloud. Excellent problem-solving skills and ability to perform well in a team.

EXPERIENCE

Telkom University - Bandung, Indonesia
Research Assistant (August 2021 – January 2022)

- Doing research on fundus image with lecturers and research team using Google Collaboratory and TensorFlow library.
- Classifying eye diseases based on fundus images, namely cataracts, glaucoma, and diabetic retinopathy based on 399+ datasets.
- Conducting research focused on cataracts using machine learning models: GoogLeNet, ResNet, MobileNet, and the proposed model.

Tokenomy Ltd. - Jakarta, Indonesia
Development Engineer Intern (September 2021 – December 2021)

- Compile system documentation of every feature in the Tokenomy web application to make it easier for new employees and other teams to understand the high-level architecture of Tokenomy.
- Installing Grafana and Prometheus on the Tokenomy Server makes it easier for the tech ops team to monitor infrastructure, web applications log, and web app performance.
- Providing 10+ information every day about the crypto market to assist the tech ops team in monitoring the movement of the crypto market.

Telkom Indonesia - Medan, Indonesia
Access Service Operation Intern (July 2020 - August 2020)

- Analyzing 10+ data customers every day from each internet number which includes all Indihome customers in Medan and modifying customer's package and optimization CPE/NTE performance.
- Maintaining network stability and the condition of the internet by checking internet specs as well as improving and repairing problematic systems for customers to restore conditions for the better.
- Manage more than 10+ user data in subscription registration through sales or websites on Indihome services and problems also executing and monitoring new installs of Indihome services through K-Pro web within reach of Telkom Medan.

EDUCATION

Telkom University (2018 – August 2022)
Bachelor of Telecommunication Engineering - GPA 3.03

Sekolah DevOps Cilsy (January 2022 – May 2022)
DevOps Engineer

Bangkit Academy (February 2021 – July 2021)
Cloud Computing Learning Path

CERTIFICATIONS

- Microsoft Certified: Azure Fundamentals
- ADINUSA (Akademi Digital Nusantara): Docker For DevOps
- ADINUSA (Akademi Digital Nusantara): Linux System Administration
- AWS Academy Graduate – AWS Academy Cloud Developing
- AWS Academy Graduate – AWS Academy Cloud Foundations
- Alibaba Cloud: Alibaba Cloud Associate (Cloud Computing)
- Google: Google IT Automation Professional Certificate
- Google: Google IT Support Professional Certificate
- Dicoding Academy: Cloud Practitioner Essentials (Belajar Dasar AWS Cloud)
- Dicoding Academy: Memulai Pemrograman Dengan Python
- Dicoding Academy: Belajar Dasar Pemrograman Web
- Cisco Networking Academy: Programming Essentials in Python

SKILLS

- Cloud Computing Platform (AWS, Azure, GCP)
- Source Code Management (Github)
- Cluster Management (Kubernetes)
- Kubernetes Management (kOps)
- Docker
- CI/CD (Jenkins)
- IaaS (Ansible)
- Monitoring & Logging (Grafana-Prometheus and EFK Stack)
- Programming Language (Python, C, PHP)

Projects

Sekolah DevOps Cilsy

1. Build On-Premises Infrastructure for Web Apps
   - Create a server infrastructure on simple premises, i.e., web server and database server services for Web Applications and social media.
   - Automated build infrastructure using a bash script and stored in the GitHub repository.

2. Build AWS Cloud-Based Infrastructure for Apps
   - Make the most effective budget planning to use the cloud.
   - Create an infrastructure topology for all apps that are used.
   - Create a cloud-based infrastructure that has the ability to share traffic that is useful for handling high user activity.
   - Separate the database from the main server so that it can perform database mirroring.
   - Using and redirecting domain on Route53.

3. Build Container Orchestration-Based Infrastructure
   - Create a suitable and efficient topology for infrastructure for staging and production environments with three web apps.
   - Make a budget planning for the use of three months.
   - Create a Kubernetes cluster with kops and divide the environment using the staging and production namespaces.
   - Create an image of social media web apps that are integrated with RDS and landing pages.
   - Deploy social media, landing page, and WordPress to the Kubernetes cluster.
   - Direct all web apps on the route53 domain according to the desired domain.

4. On-Premises Infrastructure Migration to The AWS Cloud
   - Design infrastructure topology for web-based to-do list applications built using the MERN stack (MongoDB, ExpressJS, ReactJS, and NodeJS).
   - Make the most effective budget planning to use in the use of the cloud usage for 6 months.
   - Separating frontend, backend, and database services.
   - The entire system is container-based and continuous process development using Docker, Kubernetes, and Jenkins.

- Implemented autoscaling feature that can prevent slow servers during high traffic using Horizontal Pod Autoscaling.
- Central monitoring system for all containers and servers using Grafana-Prometheus.
- Implement central logging for all containers and servers with EFK Stack.

Bangkit Academy

1. Pafin Application
    - Built Pafin (Partner Finder) Application Architecture using Firebase and Google Cloud Platform.
    - Integrating Natural Language Processing system into Google Cloud Platform, ensuring machine learning works properly using cloud functions and cloud run.
    - Led the application and design of the Pafin, ensuring a consistent user experience in mobile apps.

MariBelajar - Intelligence cloud Track

1. Website & Chatbot Online Services for Capstone University Academic Agencies
    - Build a WordPress-based university website with the Nginx web server.
    - Install WordPress using docker and integrate chatbot power virtual agent with Capstone University web.
    - Configure the Azure VM that will be used so that the web can be deployed and accessed.