EKKY DEFA RIZKYAN

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Experience .

Quipper | Quipper Edukasi Indonesia
Remote, Indonesia

Senior Site Reliability Engineer
September 2022 – Present

Quipper is an educational technology platform providing interactive learning experiences for students and educators. Our goal is to enhance learning by making education more accessible, engaging, and personalised. We also provide teachers with tools for creating and managing lessons, monitoring student progress, and providing feedback.

As an SRE Engineer at Quipper, I'm responsible for levelling up our infrastructure, deployment processes, and engineering experience stack. My responsibilities include:

- Building and maintaining reliable infrastructure using cloud platforms, SaaS, and open-source tools
- Automating infrastructure management using Infrastructure as Code practices
- Contributing to and leveraging open-source software to support Quipper's services
- Collaborating with development teams to improve product development, CI/CD pipelines, resource management, and application stability
- Optimising resource usage and costs while enhancing monitoring and troubleshooting

Achievements:

- Migrated CI/CD from CircleCI to GitHub Actions with self-hosted runners, saving $6k/month. Created actions and workflows to help developers migrate and improve their experience, ensuring self-sufficiency.
- Transformed the development process by CI/CD migration. Track deployment frequency, measure integration and deployment times and optimise based on data-driven insights. Boosted developer productivity by 83% through targeted improvements.
- Migrated public endpoints to AWS CloudFront and implemented AWS WAF protection to handle DDoS attacks. Safeguarded services, strengthened resilience, and ensured continuous availability.
- Research and develop an AI-powered documentation copilot using GPT-4 and Azure Cloud to reduce SRE workload and help developers find answers independently. Uses NLP to assist developers in accessing relevant docs and resolving issues. Streamlines development and allows SRE to focus on strategic tasks, improving productivity and efficiency.
- Architect, develop and implement a distributed automated testing solution to enhance the performance of the QA team. My contribution significantly reduces the time-consuming and costly process, transforming it from 3 hours for each test scenario to 15 minutes each, while lowering operational costs by approximately $60,000 annually. This also reduced operational overhead and manual testing effort, unlocking significant non-tangible savings across teams.
- Design and implement various workflows and automations using GitHub Actions and Python to enhance team efficiency and minimise operational overhead. These automations empower developers, QA, and SRE teams to work more effectively by streamlining repetitive tasks and ensuring faster delivery cycles. Some solutions automatically shut down unused clusters and resources, directly contributing to significant cost savings. Additionally, the workflows play a role in incident mitigation by reducing manual intervention and accelerating recovery during critical events.

eFishery | Multidaya Teknologi Nusantara
Remote, Indonesia

DevOps Engineer
June 2021 – September 2022

eFishery is the first Aquaculture Technology startup in Asia that develops innovations in the aquaculture field. I'm fortunate enough to join this awesome team as a DevOps Engineer, where I'm responsible for managing developer and deployment experience using various stacks and innovations.

My responsibilities in the role consisted of:

- Develop and maintain our custom CI/CD tools using GO
- Ensuring reliability across various services, systems, stacks and platforms
- Researching various innovations to solve arising problems and improve our existing system architecture
- Leading various strategic initiatives with multiple team members across different teams

What I have been working on so far:

- Managing and maintaining our infrastructure, which uses Hashicorp Nomad as an orchestrator, consisting of 30+ nodes and 700+ containers
- Developing multiple features for our custom CI tooling using the GO Language
- Developing custom developer tools using the GO Language to improve the existing Development Experience
- Migrating our secret management tools from Bitbucket to Hashicorp Vault to improve security and engineer experience, also integrating the new tools into our CI/CD Tools
- Designing and implementing custom architecture to migrate our Odoo from a paid platform to our local self-hosted platform
- Researching, designing and implementing Centralized Logging and Monitoring tools using ElasticStack to log and monitor our service and resources across various stacks, systems and platforms. Serving 40+ applications with 4 billion logs ingested daily, giving an impact on both the engineers, the business and the security team.
- Researching and designing better security using ZTNA for accessing our internal network

Halofina | Akselerasi Edukasi Internasional
Bandung, Indonesia

System Engineer,   *October 2019 – February 2021*

Halofina is a Goal-Based robo-advisory platform with a mission to enhance people's lives through financial education and solutions. A few weeks after joining the company, my technical leader realised my urge to learn and reassigned me to a new role as a System Engineer with responsibilities such as ensuring high levels of availability and security for our systems and infrastructure while also researching and developing a new solution to optimise the system's performance. I'm grateful for this reassignment as I learn a lot from this role.

My responsibilities in the role consisted of:

- Manage and monitor existing systems and infrastructure
- Deploy, install, configure, test and maintain operating systems, application software and system management tools
- Ensuring high levels of systems and infrastructure availability
- Monitor and test application performance for potential bottlenecks, identify possible solutions and work with developers to implement those fixes
- Maintain security, backup and redundancy strategies
- Write and maintain custom automated scripts to increase system efficiency and lower the human intervention time

Halofina | Akselerasi Edukasi Internasional
Bandung, Indonesia

Back-End Developer   *March 2019 – October 2019*

Halofina is a Goal-Based robo-advisory platform with a mission to enhance people's lives through financial education and solutions. My role as a back-end engineer is to develop secure API using Java and PHP, while also researching and developing several libraries to support and easing the API development over time so the new module could be developed in a rather short time. Also, while I'm in this role, I've been kindly allowed to do API Stack Migration from PHP to Java using Vertx Framework.

My responsibilities in the role consisted of:

- Developing a secure API
- Developing several libraries to support and ease API Development
- Researching solutions to improve API performance
- Migrating API Stack from PHP to Java with Vertx framework
- Writing a unit test to ensure the API Functionality
- Writing full API Documentation for ease of use

Sirus+ | Sirus Teknologi Utama
Bandung, Indonesia

Back-End Developer   *August 2018 – March 2019*

SirusPlus is a sister company of Lussa Teknologi that focuses on solving problems in the Healthcare Industry. My role as a Back-End engineer is to develop a secure API using Node.js and Typescript with multiple endpoints over multiple methods (Commonly RESTful and GraphQL), while the API itself is monolithic, but I made it modular and scalable so I can convert it to microservices if the team decide to do so. I also implemented unit-test, e2e-test, and generated documentation for the whole API.

My responsibilities in this role consisted of:

- Develop an API Back-End to handle hospital registration and other entry points
- Research emerging technologies to increase API efficiency and effectiveness
- Write Unit-Testing and E2E-Testing to ensure that the developed API is fulfilling the client's requirements
- Deploying the developed API to the required environment using CI/CD platform

Sirus+ | Sirus Teknologi Utama

Lead Developer | System Analyst

Bandung, Indonesia

August 2018 – November 2018

SirusPlus is a sister company of Lussa Teknologi that focuses on solving problems in the Healthcare Industry. My role is to translate the long-term business goals of an organisation into technical solutions and develop a plan for the computer systems that will be able to reach those goals. Then run tests and diagnose problems to make sure that critical requirements are met. All while making sure that all projects are delivered on time, within the scope, and coordinating the internal resources with third parties.

My responsibilities in this role consisted of:

- Analyse systems requirements and produce specifications for new or modified systems
- Coordinate internal resources and third parties for the flawless execution of projects
- Conduct testing to ensure that the systems work as expected
- Ensure that all projects are delivered on time, within the scope and within the budget

Lussa Teknologi | Lussa Teknologi Global

Back-End Developer

Bandung, Indonesia

August 2017 – August 2018

From developing JS robots and healthcare apps to blockchain, Lussa Teknologi utilises advanced technology to solve important problems. Lussa helps aspiring entrepreneurs & businesses by forming partnerships in product development and bringing their ideas to life, then together build a sustainable business out of it.

My responsibilities in this role consisted of:

- Developing a secure API for the Sirus+ web and mobile application
- Maintain API, ensuring high-performance response to front-end requests
- Deploying the developed API to the required environment using the CI/CD platform

Telkom | Telekomunikasi Indonesia, Branch Malang

Intern IT Support Staff

Malang, Indonesia

January 2016 – February 2016

My responsibilities in this role consisted of:

- Maintaining the operability of various software and hardware
- Maintaining a network across departments and buildings

Telkom | Telekomunikasi Indonesia, Branch Surabaya

Intern Field Staff

Surabaya, Indonesia

September 2011 – October 2011

My responsibilities in this role consisted of:

- Conducting installation and maintenance of various network devices
- Contributing to the Surabaya E-RT/RW Project

Education

Brawijaya University   *Malang, Indonesia*
S.Kom in Computer Engineering (Bachelor of Science equivalent)   *2012 - 2016*

Telkom School Malang   *Malang, Indonesia*
Computer and Network Engineering   *2009 - 2012*

Projects & Portfolios .

TypescriptGraphQL Demo API   *http://bit.ly/2SOMCmy*
Portofolio Demo API using Typescript with ECMAScript 2017 (ES8) and GraphQL

Technology Stack: *JavaScript, Node.js, Express, Typescript, MySQL, Sequelize ORM, GraphQL, RESTful*

Sirus+
Integrated information system for various healthcare providers
Technology Stack: *JavaScript, Node.js, Express, Typescript, MySQL, RabbitMQ, PostgreSQL, Sequelize ORM, GraphQL, RESTful, Docker, Cypress*

Halofina
Financial planner and consulting application

Technology Stack: *Java, Vertx, Galera Cluster, Nginx, Docker, AWS, GCP, Heroku, ELK Stacks*

Certifications/Licenses

Cisco CCNA Routing and Switching: Introduction to Network
November 2015 to Present

Microsoft Office Desktop Application
August 2015 to Present

Oracle Database 10g: 2 Day DBA
September 2011 to Present

Awards .

Accomplished an Excellent Grade on the Microsoft Office Desktop Application Certification
August 2015

Award for Contributing to Telkom Surabaya E-RT/RW Project
September 2011