Rifqi Farel Muhammad

rifqifarel222@gmail.com | linkedin.com/in/rifqi-farel-muhammad | +6285892025984 | rifqifarelmuhammad.tech |
github.com/rifqifarelmuhammad | Jakarta, Indonesia

Computer science student at the University of Indonesia with a strong passion for software engineering. Experienced in designing and implementing RESTful APIs, building interactive and responsive websites, and architecting microservices. Proficient in various programming languages, frameworks, and tools, with a solid understanding of object-oriented programming.

PROFESSIONAL EXPERIENCE

Bosnet Distribution Indonesia - Jakarta, Indonesia   *January 2025 - June 2025 (Expected)*
Software Developer Intern
- Revamped 6 pages of the desktop application's interface into a web-based UI, enhancing the visual appeal while ensuring the core functionalities remained intact.
- Developed and improved UI components within the company's web component library, ensuring enhanced functionality and reusability.

University of Indonesia - Depok, Indonesia   *July 2022 - June 2025 (Expected)*
Teaching Assistant of Software Product Line Engineering, Advanced Programming, Data Structures and Algorithms, Programming Foundations 2
- Became the mentor of three teams that developed a microservice-based website and implemented TDD, clean code, design patterns, asynchronous programming, profiling, and monitoring.
- Created 4 programming assignments covering topics such as time complexity, recursion, sorting, linked lists, AVL trees, object-oriented programming concepts, software product line, delta-oriented programming, and variability modules for java.

Gradient - Jakarta, Indonesia   *January 2024 - January 2025*
Software Engineer Intern
- Built many robust RESTful APIs and interactive UIs with data caching using Redux that has been used by hundreds of thousands of users.
- Learned and implemented many things related to SEO, like sitemap, HTML semantics, HTML schema, URL structure, and metadata (title and description) to improve SEO.
- Implemented rate limit to prevent DDOS attacks.
- Created a semi-automated program to generate video transcripts and descriptions with the help of OpenAI.
- Implemented advanced search feature with Typesense as the search engine provider.
- Developed Gradient mobile application.

EDUCATION

University of Indonesia   **Depok, Indonesia**
Bachelor of Computer Science (GPA: 3.91)   *August 2021 - July 2025 (Expected)*
- **Thesis:** Implementation of Multi-Delta and Multi-Level Configuration in Prices-IDE: A Case Study of Payment Gateway Product Line.
- **Courses:** Software Engineering, Data Structures & Algorithms, Cloud Infrastructure, Operating Systems, and Semantic Web.

Bangkit Academy   **Indonesia**
Mobile Development Cohort (Final Score: 92.55)   *February 2024 - July 2024*
- Graduated with Distinction (top 10%) on Android Learning Path.
- Developed 5 Android applications (using Android XML and Android Jetpack Compose) that implement background threads, networking, local data persistence, animation, media (gallery and camera), and geo location.`

SKILLS AND LANGUAGES

- **Languages**: Java, TypeScript, JavaScript, Python, Golang, C#, Rust, Kotlin, Dart, SQL, SPARQL, and HTML.
- **Frameworks**: Spring Boot, NestJS, ExpressJS, Django, Gin, Gorilla Mux, .NET, NextJS, ReactJS, Flutter, Android (XML and Jetpack Compose), and ReactNative.
- **Technologies/Tools**: PostgreSQL, MySQL, Tailwind, Redux, Docker, GCP, AWS, Firebase, Prometheus, Grafana, Sentry, Sonar (SonarQube and SonarCloud), Memcached, RabbitMQ, RDF, RDFS, and Web Ontology Language (OWL).
- **Other Tools & Concepts:** Git, GitHub Actions, CI/CD, RESTful APIs, gRPC, GraphQL, Postman, Unit & Integration Testing (JUnit, Jest, Mockito), and Agile/Scrum workflow.

PROJECTS

CirrhoCheck (Source Code | Documentation) (2024)
- Roles as a Scrum Master, ensuring smooth sprint execution, also serving as the lead engineer ensuring the robustness of CirrhoCheck, as well as contributing as a full-stack developer.

Worldie (Source Code | Documentation) (2023)
- Developed using the Unified Process Model, thus requiring a software requirements specification and design document.

PUBLICATIONS

- Sulthan F. Tsany, **Rifqi Farel Muhammad**, Dhafin Raditya Juliawan, Maya R. A. Setyautami, and Ichlasul Affan. 2025. Delta-Oriented Multi-Level Configuration in Payment Gateway Product Lines. In 19th International Working Conference on Variability Modelling of Software-Intensive Systems (VaMoS 2025), Rennes, France. Association for Computing Machinery. ISBN: 979-8-4007-1441-2.

ORGANIZATIONAL EXPERIENCES

COMPFEST 15 - Depok, Indonesia   *March 2023 - November 2023*
Software Engineering Team Member
- Built 3 services in the backend that implemented RESTful APIs, clean code, and scalability.
- Built 3 pages in the frontend that implemented data caching using Redux.
- Improved 2 components of Compfest open source project "Silicon" by changing the way the components are used to make them more user-friendly and improving the UI. The components were tested by users and found to be easier to use and understand, and also have better UI than the previous versions.