

MUHAMAD REZA MUKTASIB

FULLSTACK ENGINEER | SOFTWARE ENGINEER

Jakarta, Indonesia | Email : reza.muktasib@gmail.com | Website : <https://mrezamuktasib.my.id>

SUMMARY

Backend-focused Full Stack Engineer with hands-on experience building scalable web applications, APIs, and distributed systems using Node.js, TypeScript, Java, Laravel, and modern cloud infrastructure. Experienced in designing secure backend services, microservice-based architectures, WebSocket/WebRTC systems, and enterprise integrations across warehouse management, healthcare, and online assessment platforms. Proficient in AWS, Docker, CI/CD pipelines, PostgreSQL, and MongoDB within Agile delivery environments.

SKILLS

- Languages
 - Backend
 - Frontend
 - Infrastructure & DevOps
 - Databases
 - Architecture & Practices

: JavaScript, TypeScript, Java, Python, PHP, Golang

: Node.js, Express.js, Laravel, Spring, GraphQL, WebSockets, Microservices, REST API

: React, Next.js, Tailwind CSS, Angular

: AWS, GCP, Docker, CI/CD, Nginx, Apache

: PostgreSQL, MySql, MongoDB, Firebase, Redis

: API Design, System Design, Agile/Scrum, Scalable Systems, Secure Application Development, Hexagonal Architecture Implementor, Event Driven Architecture, IOT, STM 32/Arduino, Digital Twin Robotic

EDUCATION

Politeknik Elektronika Negeri Surabaya - Associate Degree in Informatics Engineering

2022 – 2025 | GPA: 3.94/4.00

Hanyang University - Student Exchange Program, Computer Science

2024 – 2025 | South Korea

EXPERIENCE

- Mid Level Backend Engineer | [PT. Paragon Technology and Innovation](#)

August 2025 – August 2026 | Jakarta, Indonesia | Contract (through PT Sobat Kreasi Nusantara)

- Contributed to the development and scaling of an enterprise **Warehouse Management System (WMS)** using **JavaScript (Node.js/Express.js)** and **PostgreSQL**, integrated with **ERP** and **SAP** ecosystems.
 - Implemented **Batch Management** features across **24+ active warehouses**, improving inventory traceability and operational consistency.
 - Developed **RESTful backend services** and integration modules for real-time synchronization of warehouse operations, logistics workflows, and product batch data between WMS and SAP.
 - Optimized backend business logic and database operations to support high-volume warehouse transactions while maintaining system reliability and performance.
 - Collaborated with frontend engineers and cross-functional teams in an **Agile/Scrum** environment to deliver production-grade features and system enhancements.
 - Supported warehouse operations handling **tens of thousands of monthly transactions**, contributing to a scalable and reliable backend platform.
- Mid Level Backend Engineer | [PT. Sobat Kreasi Nusantara \(SOBATBISNIS\)](#)

August 2025 – August 2026 | South Jakarta (Sudirman), Indonesia | Contract

- Developed and maintained enterprise web applications using **AngularJS**, **Java**, **Spring Boot**, and **microservices** architecture across frontend and backend systems.
 - **Assigned to Sampo Insurance Indonesia**, developing and enhancing insurance platform features, implementing secure service integrations, and maintaining backend microservices for business-critical operations.

- **Assigned to Biomedilab Klinik**, developing healthcare application features, optimizing REST APIs and database performance, and improving system reliability for clinical workflows.
- Designed and implemented **RESTful APIs** and service integrations to support internal business processes and third-party platforms, including **Midtrans** payment gateway integration.
- Collaborated with cross-functional teams in an **Agile/Scrum** environment to deliver scalable, maintainable, and production-ready fullstack solutions.
- Worked across multiple enterprise client projects, adapting to diverse business domains while ensuring code quality, performance, and long-term maintainability.

Freelance Fullstack Developer | [Exzam.id](#)

June 2024 – December 2025 | Surabaya, Indonesia | *Project Based*

- Developed **Exzam.id**, a multi-tenant online examination platform using **Laravel**, **React.js**, and **MySQL**, serving **1,000+ users** across schools and universities.
- Built frontend features with **React.js** and backend services with **Laravel**, implementing authentication, exam management, subscription workflows, and RESTful APIs.
- Designed reusable React components and optimized application architecture to improve development efficiency and maintain a consistent user experience.
- Optimized API performance, database queries, and backend processes to support high-concurrency online examinations with reliable system performance.
- Integrated **WebRTC-based automated proctoring**, supporting **1,000+ concurrent audio/video streams** for real-time exam monitoring, along with **Midtrans** payment gateway for subscription management.

Freelance Backend Engineer & DevOps | [Mufko App](#)

February 2025 – August 2025 | South Korea (Remote) | *Project Based*

- Developed **GraphQL APIs** with **Laravel (Lighthouse GraphQL)** consumed by a **Flutter** mobile application serving **4,100+ daily active users**.
- Built and optimized backend services, GraphQL resolvers, and database queries to improve performance and scalability.
- Produced and maintained interactive API documentation using **Scalar**, enabling efficient collaboration with frontend and mobile developers.
- Managed **AWS** infrastructure, containerized services with **Docker**, and deployment pipelines for reliable production releases.
- Monitored application health, diagnosed production issues, and maintained high service availability.

Freelance Web Developer | [Cipta Kode](#)

December 2022 – December 2025 | Surabaya, Indonesia

- Delivered **10+ fullstack web and mobile applications** using **React.js**, **Laravel**, **Python**, and **Flutter** for clients across education, retail, logistics, and business management.
- Developed responsive frontend applications, scalable backend APIs, and database solutions tailored to diverse client requirements.
- Built end-to-end solutions including an **AI-powered web application**, **SIM Kampus (Campus Information System)**, a **Flutter-based attendance application**, a **Point of Sale (POS) Management System**, and a **Warehouse Management System (WMS)** for **GlepungJowo.com**.
- Deployed and maintained production applications on cloud infrastructure, ensuring reliability, security, and maintainability.
- Collaborated directly with clients to gather requirements, design technical solutions, and deliver production-ready applications from concept to deployment.

Intern Web Developer | [PT. Digital Solusi Master](#)

December 2023-February 2024 | Sidoarjo, Indonesia

- Maintained and enhanced **Diakademik**, an education management platform built with **Laravel**, **Blade**, and **React.js**, serving **2,000+ students and staff**.
- Translated **Figma** designs into responsive and accessible user interfaces using **Laravel Blade**, **React.js**, and **Tailwind CSS**.
- Refactored legacy Laravel code and optimized frontend components to improve application maintainability, performance, and development efficiency.
- Collaborated with developers, designers, and stakeholders in delivering stable, production-ready features and enhancing the overall user experience.

HIGHLIGHTED PROJECTS

Fullstack Engineer | Procspsy (Final Year Project at Politeknik Elektronika Negeri Surabaya)

June 2024 – December 2025 | docs.procspsy.online

- Developed **Procspsy**, an open-source automated proctoring platform using **TypeScript**, **Express.js**, **MongoDB**, and **Next.js**, designed for secure online examinations.
- Architected the backend using **Hexagonal Architecture**, improving modularity, maintainability, and scalability of the application.
- Built a **WebRTC media server** using **Mediasoup** and **WebSockets**, enabling real-time audio/video streaming and communication.
- Designed and open-sourced a **Chrome Extension** for automated proctoring, implementing anti-cheating features such as tab switching detection, window focus monitoring, and screen activity tracking.
- Designed a custom **WebSocket communication protocol** to securely synchronize media streams and events between the Chrome Extension and the **Next.js** monitoring dashboard.
- Optimized the real-time streaming infrastructure to support **30 concurrent examinees** while maintaining approximately **20% CPU utilization** on a dual-core server.

Fullstack Engineer | Exzam.id (Online Exam Platform - MultiTenancy System)

June 2024 – December 2025 | exzam.id

- Developed **Exzam.id**, a multi-tenant online examination platform using **Laravel**, **React.js**, and **MySQL**, supporting **1,000+ users** across schools and universities.
- Designed and implemented frontend features with **React.js**, including a reusable internal UI component library that **reduced development time by 40%**.
- Built backend services using **Laravel**, implementing multi-tenant architecture, authentication, exam workflows, subscription management, and **RESTful APIs**.
- Integrated **Procspsy**, a **WebRTC-based automated proctoring** system, enabling secure real-time monitoring during online examinations.
- Optimized API performance and database queries to support **120 concurrent examination participants** while maintaining reliable application performance.
- Integrated the **Midtrans** payment gateway to support subscription plans, institutional licensing, and automated payment workflows.

AWARDS & ACHIEVEMENTS

- IISMA Awardee 2024 - Hanyang University, South Korea
- Silver Medal - IYSAA, WSEEC 2023 (International)
- 1st Place - Business Plan Competition, Fasilkomfest 2023 (UPN Jawa Timur)
- 2nd Place - Industrial Engineering IE FAIR 17th (ITS) (Business Plan Competition and Industrial Engineering)
- 3rd Place - Cerdas Cermat Kebangsaan, SMA Awards (Jawa Pos)
- 3rd Place - UI/UX Competition, Fasilkomfest 2023 (UPN Jawa Timur)
- 4th Place - Chemistry Competition, Universitas Airlangga

CERTIFICATIONS

- NEXT.js (JS/TS) Course - Udemy | 2025
- Golang Course - Udemy | 2025
- Docker & Kubernetes - Udemy | 2025
- Junior Web Developer Certification - BNSP | 2023
- JavaScript Fundamental - Dicoding | 2023
- SQL Fundamental - Dicoding | 2023
- Project Management - Dicoding | 2023
- Programming Basic with C - Dicoding | 2023

LANGUAGES

- Indonesian - **Native**
- English - **Advanced Proficiency (TOEIC 840)**
- Korean - **Basic / Survival Level**