

Mohamad Rexa Mei Bella

Fullstack Software Engineer

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Malang, East Java, Indonesia

PROFESSIONAL SUMMARY

Fullstack Software Engineer with 7+ years of experience architecting scalable microservices, event-driven systems, and real-time communication platforms using React, Node.js, and AWS.

Currently at 8x8, contributing to Moobidesk and Moobicast - enterprise omnichannel platforms that unify WhatsApp, SMS, LINE, Email, WebChat, and Voice (SIP) into a single workspace, with broadcast pipelines handling 100+ concurrent message deliveries in parallel. Skilled in distributed real-time systems with Socket.IO, Redis Pub/Sub, and Redis RSMQ, and in shipping serverless workloads on AWS Lambda, SQS, SNS, and S3 orchestrated through Docker and Kubernetes.

Strong end-to-end ownership - from system design and API development to CI/CD deployment and production troubleshooting - with a focus on performance, scalability, and reliability.

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Go (Golang), PHP

Frontend: React, Angular

Backend: Node.js, Express.js, Go

Cloud & DevOps: AWS Lambda, AWS SQS, AWS SNS, AWS S3, AWS ELB, AWS Athena, Docker, Kubernetes, CI/CD

Databases: PostgreSQL, MySQL, Redis, NoSQL

Realtime: Socket.IO, Redis Pub/Sub, Redis RSMQ, MQTT, SIP

Architecture: Microservices, Event-Driven Architecture, RESTful APIs

Tools: Git, Linux

WORK EXPERIENCE

Software Engineer - 8x8

January 2026 - present | Singapore - Remote

- Develop, maintain, and enhance web-based applications based on business and user requirements.
- Design scalable, secure, and maintainable system architectures.
- Collaborate with product, QA, and engineering teams to implement new features.
- Conduct code reviews to ensure code quality aligns with best practices and company standards.
- Optimize application performance, databases, and APIs to improve system efficiency.
- Identify and resolve bugs while performing troubleshooting in production environments.
- Implement integrations with third-party and internal services.
- Manage application deployment and monitoring using CI/CD pipelines.

Practitioner Lecturer - D3 Informatics Engineering - Brawijaya University

January 2026 - present | Malang, East Java

- Teach programming and software engineering courses for the D3 Informatics Engineering vocational program.
- Prepare lecture materials, practical sessions, and assessments aligned with the curriculum.
- Mentor students on real-world software development practices and final projects.
- Share industry experience to bridge academic learning with professional engineering standards.

Software Engineer - Maven Lab PTE LTD

January 2022 - January 2026 | Singapore - Remote | 4 years 1 month

- Developed web-based applications and backend systems for client and internal company needs.
- Designed and built RESTful APIs for system integration.
- Managed databases while ensuring data security and integrity.
- Collaborated with cross-functional teams in digital product development.
- Performed debugging, testing, and application performance optimization.
- Implemented new features based on business requirements and user feedback.

Senior Software Development Engineer - PT Generasi Multi Indonusa

December 2020 - February 2022 | Surabaya, East Java | 1 years 3 month

- Led application development and ensured projects were delivered on schedule.
- Designed technical solutions for complex business requirements.
- Mentored junior developers to improve technical capabilities.
- Supervised coding, testing, deployment, and application maintenance processes.
- Coordinated with stakeholders to define system requirements and development roadmaps.
- Improved software quality through code standardization and system optimization.

Freelance Software Developer - Founder - Nefitlab

October 2018 - 2026 | Malang, East Java | 8 years

- Developed websites, applications, and custom systems based on client requirements.
- Analyzed client needs and provided effective technical solutions.
- Designed databases and built backend systems.
- Performed maintenance, bug fixing, and enhancements for ongoing projects.
- Communicated directly with clients regarding project progress and requirements.
- Managed project development from planning to deployment.

Fullstack Developer - PT Finfleet Teknologi Indonesia

March 2020 - November 2020 | Malang, East Java | 9 month

- Developed both frontend and backend web-based applications.
- Built responsive and user-friendly user interfaces.
- Developed APIs and integrated frontend applications with backend services.
- Managed databases and ensured optimal system performance.
- Conducted testing and debugging to ensure application stability.
- Collaborated with teams to develop and implement new features.

Intern - Telkom Indonesia

January 2018 - April 2018 | Malang, East Java | 4 month

- Assisted in the development and maintenance of internal company systems.
- Supported the IT team in troubleshooting and system improvements.
- Prepared technical documentation and application testing.
- Assisted in implementing new features under supervisor guidance.
- Learned software development processes and engineering workflows in a professional environment.

EDUCATION

S.Kom, Computer Science

Brawijaya University | 2014 - 2019

PROJECTS

Mie Gloria - Corporate Website, Headless CMS & In-Store Kiosk

Wolftagon | May 2026 - August 2026

Bilingual (Indonesian/English) corporate and product platform for Mie Gloria, a noodle manufacturer. Covers the public website - product catalog, recipes, articles, company profile, and contact - plus a touchscreen kiosk mode for in-store displays.

Includes a custom headless CMS where admins manage products, categories, variants, recipes, articles, banners, and admin accounts, backed by a REST API with JWT authentication, role-based access, image uploads, rate limiting, and Swagger documentation. Deployed to an Alibaba Cloud VPS under PM2 with separate staging and production databases behind an nginx reverse proxy.

Technologies: Next.js, React, TypeScript, Tailwind CSS, TanStack Query, Zustand, Node.js, Express, Sequelize, PostgreSQL, JWT, Swagger, PM2, Nginx

Link: <https://gloriamie.com>

Moobidesk

Mavenlab (acquired by 8x8 Inc.) | January 2022 - present

Moobidesk is an omnichannel communication platform that integrates SMS, WhatsApp, LINE, Fiber, Email, WebChat, and WhatsApp Call into a single system. It enables centralized communication management, improving responsiveness and customer engagement.

Technologies: Node.js, React, Angular, Nats, Redis, Socket.IO, Redis RSMQ, NoSQL, Kubernetes, SIP

Link: <https://www.moobidesk.com/>

Moobicast

Mavenlab (acquired by 8x8 Inc.) | January 2022 - present

Moobicast is a microservices-based application designed for high-volume message broadcasting across multiple channels such as SMS, WhatsApp, and BCP (Business Continuity Plan). The system is built to handle high traffic efficiently, ensuring reliable and scalable communication delivery.

Technologies: Node.js, Angular, AWS Lambda, AWS SQS, AWS SNS, AWS S3, AWS Athena, Redis, NoSQL, SQL, SMPP, SFTP, AWS ELB, Docker

Link: <https://www.moobicast.com/>

Airsoft E-Commerce Platform

Nefitlab | September 2024 - December 2024

This project is an e-commerce platform developed to facilitate the buying and selling of airsoft equipment in Malang. The system provides features such as product catalog management, secure transactions, and order tracking. It is designed to support hobbyists while considering applicable regulations and responsible usage.

Technologies: Node.js, React, Redis, SQL, Cloudflare, Vercel

Link: <https://hosanaputraairsoft.com/>

Village Citizen Service System & Website: Desa Senggreng Malang (PECELTEMPEMENDOAN)

Nefitlab | April 2024 - July 2024

PecelTempeMendoan is a digital application developed to support the Senggreng Village government system, recognized as a competition-winning innovation. The platform streamlines village administration and public services, particularly in population management.

Equipped with a 24/7 WhatsApp bot, the system enables residents to access services anytime, including administrative processes and population-related requests. It also supports family planning (KB) programs, helping improve community outreach and service efficiency.

Technologies: Node.js, React, Redis, SQL, Redis RSMQ

Link: https://www.youtube.com/watch?v=-__RAZAUvxA&t=1s

ZIS Application

Nefitlab | January 2023 - July 2023

Application to help mosques manage charity and zakat donations.

Technologies: Node.js, React, Redis, SQL, Socket.IO

IoT-Based Shrimp Farm Monitoring System

PT. Generasi Multi Indonusa | April 2021 - February 2022

This system is an IoT-based dashboard for monitoring offshore shrimp farms in real-time. Data such as temperature, pH, salinity, and oxygen levels are collected from field sensors, sent to a server, and displayed on a dashboard. It helps monitor farm conditions, detect issues early, and improve operational efficiency.

Technologies: Node.js, React, Redis, SQL, Socket.IO, MQTT, Redis RSMQ

Integrated ERP System with Chat, Call & Video Call

PT. Generasi Multi Indonusa | December 2020 - February 2022

This system is an integrated ERP that not only provides standard features such as attendance and inventory management, but also includes chat and video call features to support real-time team communication. It helps improve collaboration, work efficiency, and operational management within a single platform.

Technologies: Node.js, React, Redis, SQL, Socket.IO, Redis RSMQ, Cisco Duo, SIP

ERP Dashboard

PT Finfleet Teknologi Indonesia | March 2020 - November 2020

Finfleet ERP Dashboard is an internal system designed to support office operations in an integrated way. It includes features such as employee attendance, inventory management, and shipment tracking in a centralized dashboard. With a user-friendly interface, the system helps improve work efficiency, data accuracy, and real-time operational monitoring.

Technologies: Node.js, React, Redis, SQL, Socket.IO

HUBS Application

PT Finfleet Teknologi Indonesia | March 2020 - November 2020

HUBS Application is a system used to check items at each hub and update shipment statuses in real-time. It helps ensure shipment visibility, streamline operations, and improve accuracy in logistics distribution.

Technologies: Node.js, React, Redis, SQL, Socket.IO

Merchant Application

PT Finfleet Teknologi Indonesia | March 2020 - November 2020

Merchant Application is designed for clients partnering with Finfleet to simplify the shipment process, particularly for bank-related deliveries. The application enables faster, more structured, and trackable shipment management, improving efficiency and service reliability.

Technologies: Node.js, React, Redis, SQL, Socket.IO

POS Ayam Lodho Pak Oleb Malang

Self-Employed | September 2019 - October 2019

POS System is an application designed to manage sales transactions, inventory, and billing in an integrated way. It includes common POS features, enabling efficient operations, accurate sales recording, and effective stock management.

Technologies: Node.js, React, SQL

Letter Management System (LMS)

Telkom Indonesia | January 2018 - April 2018

During my internship at Telkom Indonesia Malang, I developed a correspondence management system to support the administration of incoming and outgoing letters. The system records detailed information, including the assigned delegate and the author of outgoing letters. This solution improves organization, traceability, and overall administrative efficiency.

Technologies: PHP Laravel, SQL

AWARDS

Finalist BCA YOUNG HACKER

BCA | Jan 2020

PUBLICATIONS

Web Server Load Balancing Based On Memory Utilization Using Docker Swarm

IEEE | Apr 2019

Link: <https://ieeexplore.ieee.org/document/8693212>

LANGUAGES

Bahasa Indonesia - Native

English - Professional working proficiency