

RAIHAN OZA SAMUDERA SIREGAR

Software Engineer | Full Stack Developer

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PROFESSIONAL SUMMARY

Full Stack Developer with 3+ years of professional experience building scalable web and mobile applications across the JavaScript/TypeScript ecosystem. Delivered production-grade ERP and HRMS platforms serving 100+ users, plus government service portals, using Next.js, NestJS, React Native, and SQL Server/PostgreSQL. Owns end-to-end product delivery from requirement analysis and system design through deployment and monitoring, with a strong focus on performance optimization, authentication/RBAC, and large-scale data handling. Comfortable owning features independently while collaborating closely with cross-functional teams.

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, SQL, HTML5, CSS3, PHP

Frontend: React.js, Next.js (SSR/SSG/ISR), Redux, Zustand, React Query, Tailwind CSS, shadcn/ui, Vite

Backend: Node.js, NestJS, Express.js, Laravel, REST APIs, JWT Authentication, Role-Based Access Control (RBAC)

Mobile: React Native, React Redux, React Query

Databases: Microsoft SQL Server, PostgreSQL, MySQL, MongoDB, Prisma ORM

DevOps & Tools: Git, GitHub, CI/CD, Docker, Postman, ESLint, Prettier, Linux

Practices: Agile/Scrum, Code Review, System Design, Query Optimization, Indexing, API Integration, Performance Optimization

PROFESSIONAL EXPERIENCE

Full Stack Web Developer

Aug 2024 – Present

PT. Transporindo Agung Sejahtera

Medan, Indonesia

- Architected and delivered multiple production-grade internal web platforms using Next.js (TypeScript) and NestJS, supporting core export-cargo and HR business operations.
- Built an internal ERP application for export cargo shipping that centralized loading data, operational records, and approval workflows eliminating manual spreadsheet tracking and improving data accuracy across operations teams.
- Designed and shipped a Human Resource Management System (HRMS) serving 100+ employees, covering employee data, leave requests, multi-level approvals, and automated leave-balance tracking, replacing fragmented manual processes.
- Built a WhatsApp Bot monitoring service that performs continuous uptime checks on internal websites and servers, cutting incident response time from ~30 minutes to under 5 by pushing real-time outage alerts to on-call groups.
- Modeled and optimized Microsoft SQL Server schemas for high-volume operational data through indexing strategies, query tuning, and stored procedures, reducing query response times by 50%+.
- Implemented predictable state management with Redux across complex multi-module frontends, improving maintainability and reducing prop-drilling across feature teams.
- Owned the full software development lifecycle requirement analysis, system design, implementation, testing, deployment, and post-release maintenance collaborating with operations and HR stakeholders to translate business needs into scalable technical solutions.

Frontend Developer (Internship)

Aug 2023 – Dec 2023

Dinas Sosial Kota Medan (Social Services Department)

Medan, Indonesia

- Collaborated with 5 cross-functional teams to design and ship public-facing digital services helping citizens check social assistance status and access government programs.
- Built a responsive social-assistance status portal using React.js, TypeScript, Zustand, Tailwind CSS, and shadcn/ui, serving the general public with a clean and accessible UX.
- Developed the Aplans Booster web platform with React.js, React Query, Tailwind CSS, and TypeScript; integrated REST APIs via Postman and contributed to sprint planning and feature prioritization.
- Built the Aplans Verivali mobile app using React Native, Redux, and React Query for field officers to verify and validate aid recipient data on-site.
- Standardized the frontend codebase by introducing ESLint and Prettier configurations, improving code consistency across multiple repositories and reducing review friction.

- Drove engineering best practices through code reviews, CI/CD pipelines, and internal knowledge-sharing sessions presented to fellow engineers.

Full Stack & Mobile Developer

Jan 2023 – Aug 2023

PT. Metromatika Teknologi Rekayasa

Medan, Indonesia

- Delivered multiple production web and mobile applications for official Indonesian government services using Next.js, Laravel, React Native, Tailwind CSS, Zustand, Redux, and React Query.
- Built admin dashboards with CRUD modules, role-based access control, and complex reporting views adopted by internal operators.
- Optimized mobile application performance across a wide range of Android devices, improving load times and delivering a smoother user experience.
- Maintained existing codebases through regular security patches, dependency upgrades, and performance refactors to keep applications stable in production.
- Partnered with product, design, and backend teams to translate business requirements into technical specifications and ship features on schedule.

Full Stack Developer (Internship)

Aug 2022 – Dec 2022

Diskominfo Kota Medan (Communications & Informatics Office)

Medan, Indonesia

- Developed and launched the “Balitaku” React Native mobile app in just 2 months a maternal-health support tool integrated with a QR-code system used across municipal services.
- Built a CMS-style web platform enabling the Medan city government to spin up dedicated sub-sites for individual municipal services, accelerating digital service rollout.
- Supported and integrated data for 100+ users across departments, enabling smoother cross-application data flow.
- Wrote clean, typed React + TypeScript code with a strong focus on web performance and reusability.

Full Stack Developer (Internship)

Jan 2022 – May 2022

PT. Indonesia Gadaai Oke

Medan, Indonesia

- Built and maintained the core pawnshop management system (PHP, Laravel, Bootstrap) serving 10+ outlets across North Sumatra and handling 100+ transactions per day.
- Improved system usability and workflow ergonomics for branch operators, contributing to a 40% increase in transaction throughput.
- Resolved production issues with fast turnaround to maintain business continuity, earning consistent positive feedback from end users.

SELECTED PROJECTS

Ameera Travel Umroh Finance Web Platform

Jul 2024 – Sep 2024

React.js, TypeScript, Tailwind CSS, Node.js, Express.js, PostgreSQL, JWT

Solo Project

- Single-handedly designed, developed, and deployed an end-to-end finance management platform covering frontend, backend, and DevOps.
- Built secure REST APIs with Node.js + Express.js and PostgreSQL, implementing JWT authentication, role-based access control, and encryption for sensitive financial data.
- Set up monitoring and structured logging to ensure continuous uptime, faster debugging, and a strong security posture.

Aplans Booster Public Data Verification Platform

Oct 2023 – Dec 2023

React.js, Vite, React Query, shadcn/ui, Zustand, Tailwind CSS, Laravel

Government Service

- Designed a clean, user-friendly interface for citizens to submit forms and review submission history.
- Collaborated with UI/UX designers and backend engineers to ship a responsive, accessible web product.

Aplans Verivali Field Verification Mobile App

Aug 2023 – Sep 2023

React Native, Zustand, React Query, WhatsApp Gateway

Government Service

- Built a mobile tool for officers to verify and validate aid-recipient data directly in the field.
- Integrated a WhatsApp Gateway for OTP delivery and real-time field communication.

Balitaku Maternal & Child Health Mobile App

Oct 2022 – Dec 2022

React Native, Express.js, React Query, WhatsApp Gateway

Municipal Health Service

- Developed a mobile app supporting stunting-prevention programs for infants in Medan, providing curated health information for mothers.
- Implemented WhatsApp-based OTP authentication for secure, friction-free onboarding.

SIIMPAL Selfie Attendance Mobile App

React Native

May 2023 – Jul 2023

Medan Tourism Office

- Shipped a selfie-based attendance application for tourism office employees, simplifying daily check-ins through device camera integration.

EDUCATION

Bachelor of Information Systems Engineering

Universitas Muhammadiyah Sumatera Utara (UMSU)

Sep 2020 – Sep 2024

Medan, Indonesia

GPA: 3.65 / 4.00

Relevant Coursework: Algorithms, Data Structures, Software Engineering, Object-Oriented Programming, Database Systems, Web Development

LANGUAGES

Indonesian (Native) | **English** (Professional Working Proficiency)