

# Khairil Rahman Hakiki

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## SUMMARY

Results-driven Software Engineer with a strong foundation in building high-performance, scalable web applications. Expertise in modern full-stack development using **React.js**, **TypeScript**, and **Go (Golang)**. Proficient in designing cloud-native architectures, implementing microservices, and optimizing system reliability.

## EDUCATION

**State Islamic University of Imam Bonjol Padang**

*Bachelor of Information Systems*

Padang, Indonesia

*Aug. 2022 – Present*

- **Relevant Coursework:** Data Structures & Algorithms, Software Engineering, Statistics, Operating System, Network, Project Management, Databases, and UI/UX Design.

## TECHNICAL SKILLS

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

**Frontend:** React.js, Next.js, Vite, Redux Toolkit, Zustand, TanStack Query, Tailwind CSS, Shadcn UI

**Backend:** Node.js, Express.js, GoFiber, RESTful APIs, gRPC, Microservices, OAuth2.0, JWT

**Database & ORM:** PostgreSQL, Redis, MySQL, Prisma, TypeORM, GORM, Firebase, Supabase

**DevOps & Tools:** Docker, Kubernetes, Prometheus, Grafana, NGINX, RabbitMQ, GitHub Actions, Figma, Postman

## WORK EXPERIENCE

**Software Engineer**

*TIME Language Centre*

Sep. 2025 – Des. 2025

*Padang, Indonesia*

- Spearheaded the modernization of legacy systems into a scalable **Microservices** architecture using **Go (Fiber)** and **Node.js**, significantly improving system maintainability and fault tolerance.
- Implemented **Domain-Driven Design (DDD)** principles to align software architecture with complex business logic, ensuring a robust and evolvable codebase.
- Optimized backend performance by integrating **Redis** for rate limiting, caching hot data and **RabbitMQ** for asynchronous event-driven processing, reducing API latency by 40%.
- Orchestrated containerized deployments using **Docker** and **Kubernetes**, configuring **Horizontal Pod Autoscaling (HPA)** to handle high-traffic spikes seamlessly.
- Secured payment workflows by integrating **Xendit** payment gateway and enforced rigorous security standards with **OAuth 2.0** and **JWT** authentication.
- Ensured system structure and reliability by implementing comprehensive unit and integration testing using **Go-Test** and **Jest**, while establishing real-time monitoring and observability with **Prometheus** and **Grafana**.

**Junior Frontend Developer**

*CodeAtHome*

Apr. 2025 – Present

*Lampung, Indonesia*

- Collaborated with cross-functional teams to build and maintain responsive web applications using **React.js** and **Next.js**, strictly adhering to clean code practices.
- Standardized frontend development workflows by implementing reusable component libraries with **Tailwind CSS** and **Shadcn UI**, accelerating feature delivery time.
- Enhanced application performance and state management efficiency using **TanStack Query** and **Redux**, resulting in a smoother user experience.

**Software Engineer Intern**

*PT Astra International Tbk - TSO Auto2000*

Jan. 2025 – Mar. 2025

*Labuhanbatu, Rantauprapat*

- Engineered an AI-powered Car Recommendation System utilizing **Python** and **Generative AI**, streamlining the customer decision-making process sales efficiency.
- Developed 'ReminderApp', a critical internal tool for managing vehicle document renewals (STNK/BPKB), featuring role-based access control (RBAC) and automated notifications.
- Automated repetitive administrative tasks using **Google Apps Script**, reducing manual data entry workload by approximately 30%.

## PROJECTS

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### Personal Website | *Modern Fullstack Portfolio*

- Engineered a high-performance personal platform using **Next.js**, featuring a custom **MDX**-based blog engine.
- Developed a low-latency interactive **Guestbook** service using **Bun** and **Elysia**, optimizing for rapid request handling.
- Integrated **Gemini AI** to provide a context-aware conversational assistant for portfolio exploration.

### Neon Slither | *Real-Time Multiplayer Game*

- Architected a high-performance multiplayer snake game using **Go**, **Redis**, and **WebSocket**, implementing **delta state compression** for **95% bandwidth reduction** in real-time sync.
- Engineered **client-side prediction** and **spatial hash grid** collision detection ( $O(n)$  vs  $O(n^2)$ ), enabling 10,000+ entities and smooth 60 FPS gameplay at 200ms+ latency.

### SyncBlog | *Full Stack Blog Platform*

- Designed a scalable blogging architecture with a **Next.js** frontend and **Express.js** backend, ensuring clean separation of concerns.
- Implemented secure **OAuth** & **JWT** authentication flows and real-time social features like comments and follows.
- Optimized frontend performance with **TanStack Query** for efficient data caching and **Redux** for complex state management.

### Hadith API | *High-Performance REST API*

- Developed a high-throughput REST API in **Go (Gin)** tailored for querying massive religious datasets with sub-millisecond latency.
- Implemented optimized indexing strategies and efficient search algorithms to handle complex multi-parameter queries.
- Authored comprehensive **OpenAPI/Swagger** documentation to ensure seamless third-party developer integration.

### SaaS NoteApp | *Subscription Management System*

- Built a secure, multi-tenant SaaS application integrating **Stripe** for sophisticated subscription billing lifecycles.
- Secured user sessions with **Kinde Auth** and enforced strict data isolation policies using **Supabase RLS**.
- Utilized **Prisma** with **PostgreSQL** for reliable data modeling and management.

### Design To Code | *AI-Powered Frontend Generator*

- Architected an AI-driven development tool leveraging **Google Gemini** to transform UI mockups into production-ready **React** code.
- Built a scalable processing pipeline with **Next.js** and **Shadcn UI**, enabling customizable model selection.
- Implemented robust state management and persistence using **PostgreSQL**, **Prisma**, and **Cloudinary** for asset storage.

## CERTIFICATIONS

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- **Frontend Developer (React)** – HackerRank (Feb 2025) | Verified Skill in component lifecycle and state management.
- **React (Basic) & Problem Solving (Basic)** – HackerRank | Demonstrated proficiency in algorithmic thinking.
- **See more at:** [linkedin.com/in/khairilrahman](https://www.linkedin.com/in/khairilrahman)