

# Muhammad Azar Nuzy

Software Engineer · Frontend-Heavy

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## PROFESSIONAL SUMMARY

Software Engineer with 3+ years of experience building production-grade web applications, with deep expertise in React/Next.js ecosystems and a full-stack reach spanning API architecture, security, and DevOps. Led frontend development of an AI automation platform (Sygma) now adopted by multiple enterprise clients — reducing proof-of-concept delivery time from one week to a matter of hours. Experienced in performance engineering, automated testing, client-facing technical presentations, and cross-functional collaboration. Passionate about building scalable, maintainable systems that deliver measurable business value.

## EXPERIENCE

### Cakra AI

Jakarta, ID | Sept 2024 – Jul 2026

#### Software Engineer · Frontend

- Spearheaded frontend development of Sygma — Cakra AI's flagship AI automation platform — from initial architecture through production release; the platform is now actively used by multiple enterprise clients to automate their core business processes.
- Built Sygma's ICR (Intelligent Character Recognition) module with a flexible, user-configurable extraction pipeline, enabling clients to extract structured data from diverse document types without engineering involvement.
- Engineered a multi-channel chatbot system deployable across web, embeddable widget, WhatsApp, and telerobotics — all manageable from a single dashboard — significantly expanding the addressable use-case surface for clients.
- Reduced POC delivery time from ~1 week to a few hours by architecting a dynamic configuration system within Sygma, enabling rapid customization across diverse client use cases.
- Developed Cakra AI's interactive marketing site ([cakra.ai](http://cakra.ai)) featuring real-time chatbot, TTS/STT voice simulation, AI-driven CV assessment simulation, and company profile — serving as the primary product showcase for enterprise prospects.
- Authored technical documentation for internal services and regularly presented product demos and technical deep-dives to prospective clients, contributing directly to sales pipeline.
- Executed end-to-end performance and automated conversation testing using k6, covering both API endpoint stress tests and full bot dialogue simulations across multiple use cases.
- Led frontend refactor of a legacy Vue.js aquaculture monitoring application to React, improving code maintainability and rendering performance.
- Contributed to additional AI-powered products: SmartSearch (LLM-based intent-driven site navigation) and an offline AI meeting notes tool supporting audio/video source input.

**Stack:** React, Next.js, TypeScript, Tailwind CSS, Styled Components, TanStack Query, Zod, React Hook Form, k6, ESLint, Husky, Prettier, Figma

### M Knows Consulting

Indonesia | Aug 2023 – Dec 2023

#### Frontend Developer Intern

- Led a 5-person frontend team to deliver [kampusgratis.id](http://kampusgratis.id) — a 100-page LMS platform — achieving >85 Lighthouse performance score across all pages, verified via Unlighthouse batch auditing.
- Drove a Next.js v12 → v13 migration, adopting the App Router and improving long-term maintainability; contributed to a 20% overall site performance improvement.
- Mentored 8 live sessions in M Knows Consulting's Frontend Development bootcamp, covering React fundamentals and modern web practices.

**Stack:** Next.js, Tailwind CSS, NX Monorepo, Figma, Unlighthouse

### Sagara Technology

Indonesia | Mar 2023 – May 2023

#### Frontend Web Developer Intern

- Designed and built the Top 100 Tech Lecturers feature page on [teknologi.id](http://teknologi.id) using Vue.js and Quasar, delivered to production within the internship timeline.
- Triaged and resolved 10 critical bugs across [techconsulta.com](http://techconsulta.com) (Next.js), resulting in a 15% measured improvement in site performance.

Stack: Vue.js, Quasar, Next.js

## Freelance

Jan 2022 – Present

### Full-Stack Developer

#### Transportation Booking Platform (Major Indonesian Transport Company)

- Built a Next.js 15 + React 19 + TypeScript web application for Airport Transfer and Car Rental bookings, deployed to production via Docker + Nginx with SSL termination and static asset caching.
- Architected a secure internal API proxy layer with automatic JWT injection, token refresh, Redis-based rate limiting, and session rotation — eliminating direct client-to-backend exposure.
- Implemented server-side security hardening: CSP headers, HSTS, origin validation, protected API key delivery, and Google reCAPTCHA across all booking forms.
- Built graceful map service degradation, automatically falling back from Google Maps to Leaflet/OpenStreetMap on config failure, ensuring zero-downtime UX.
- Shipped multi-language support (ID/EN) via next-intl and achieved 55 unit tests covering components, hooks, services, and utilities with Vitest + React Testing Library.

#### Data Recording Dashboard — Full-Stack Modernization

- Re-architected a monolithic Laravel 11 application into a decoupled Express.js v5 REST API + Next.js 15 frontend, covering ~50 data modules with ~65 Sequelize models and 72 migration files.
- Designed and deployed 5 custom AI sub-agents to automate the full migration pipeline — generating routes, controllers, models, DB migrations, React components, and Excel handlers consistently at scale.
- Implemented a multi-dimensional RBAC system with a 3-level organizational hierarchy, JWT-embedded role claims, per-route middleware authorization, and dual-mode authentication (credentials + Keycloak SSO).
- Engineered a 10-phase SQL migration pipeline with conflict-safe re-runnable scripts, cross-domain data transformation, and a full operational runbook.
- Replaced local file storage with MinIO object storage, including a Node.js migration script with dry-run mode, parallel uploads, and post-migration SQL verification.

Stack: Next.js 15, React 19, TypeScript, Tailwind CSS v4, Express.js, Sequelize, Redis, MinIO, Keycloak, Docker, Nginx, Vitest, next-intl

## SKILLS

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**Frontend:** React, Next.js, TypeScript, Vue.js, Tailwind CSS, Styled Components, TanStack Query, Zod, React Hook Form, Zustand

**Backend & API:** Node.js, Express.js, REST API design, Sequelize ORM, Laravel (familiarity), JWT, OAuth2 / Keycloak SSO

**Testing & QA:** Vitest, React Testing Library, k6 (performance & automated conversation testing)

**DevOps & Infra:** Docker, Nginx, VPS deployment, Redis, MinIO, SSL/TLS, CI config

**Tooling & Design:** Git, ESLint, Husky, Prettier, NX Monorepo, Figma, Unlighthouse

**Languages:** JavaScript, TypeScript, HTML/CSS, PHP, C/C++

## SELECTED PROJECTS

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#### GenBI UPI — Content Management System 2023

- Initiated and built a full CMS website for the GenBI UPI organization, achieving 100% reduction in ongoing website production costs by leveraging open-source tooling and a streamlined self-managed workflow.

#### Hiasee — E-Commerce Platform 2023

- Built a production-ready e-commerce site (Next.js, TypeScript, Tailwind CSS) with a performant product catalogue, cart system, and responsive UI.

## EDUCATION

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#### Universitas Pendidikan Indonesia (UPI)

2020 – 2024

B.Sc. Computer Science · GPA: 3.85 / 4.0

- 1st Place — Dev Up Rising Frontend Development, Algobash 2023
- Top 10 — Code Run Frontend Warriors, Algobash 2022
- 3rd Place — Competitive Programming, Dimas-TI AMLI 2022
- Bank Indonesia Scholarship Awardee 2022