

Alvalen Shafelbilyunazra

Fullstack Software Engineer

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Best Computer Science Graduate with 3+ years of professional experience building enterprise Java systems with Spring Boot and modern full-stack products with Next.js and Node.js, deepened into production AI engineering including multi-agent pipelines, RAG architectures, and LLM fine-tuning. A systems engineer who ships commercially, from architecting enterprise backends to founding and monetizing an AI SaaS, backed by IBM, AWS, and DeepLearning.AI certifications across cloud-native architecture, LLM fine-tuning, and deep learning fundamentals.

WORK EXPERIENCE

Fullstack Programmer

Aug 2025 – Present

MGG Software | Malang

- Contributed to a large-scale Singapore government enterprise platform on Spring Boot and React.js with multi data-source architecture with 3 MSSQL and 1 Oracle Databases, secured via Azure AD and Key Vault integration.
- Resolved a critical silent data-loss bug by refactoring transaction boundaries across 8 workflow services with independent propagation semantics, eliminating ~300 lines of duplication.
- Reduced endpoint latency by ~50% on high-traffic browse modules through targeted index review and Hibernate eager-loading.
- Delivered a third-party government system integration as first fully owned feature, running in production with zero post-launch incidents, in collaboration with cross-functional international teams under PDPA compliance.
- Accelerated team velocity by 40% through the integration of AI-Powered Developer Agents (Claude Code/Copilot) for automated documentation and testing.

Founder & Chief Technology Officer (Part-time)

Jun 2025 – Present

Intervyou | Malang

- Bootstrapped an AI-powered SaaS (Next.js, Node.js) to 3,000+ registered users and profitability, deployed on GCP Cloud Run with Cloud SQL (PostgreSQL), securing Google for Startups and NVIDIA Inception support.
- Architected a multi-agent AI assessment engine on Next.js and Node.js, orchestrating specialized agents for content evaluation, audio delivery analysis, and non-verbal assessment driving 30–50% improvement in session retention.
- Designed a token-based monetization system with payment integration handling concurrent multi-step simulations for B2B pilots across 2 SMK Telkom schools.
- Led a 3–4 person team through iterative architectural pivots while maintaining production observability via Sentry and uptime monitoring on GCP serverless infrastructure.

IoT and Fullstack Developer

Aug 2023 – Feb 2025

PT Hafdzamedia Teknologi Aplikasi | Malang

- Diagnosed and resolved N+1 query bottlenecks across legacy Laravel codebases using Debugbar and Telescope, cutting endpoint response times from 3–8s to under 300ms.
- Engineered real-time LMS features (live notifications, chat, progress sync) using Firebase Realtime Database and Laravel Broadcasting, enabling event-driven UI updates across concurrent users.
- Implemented Redis caching layer for payment processing workflows, reducing redundant DB reads and ensuring consistency via write-through sync to primary MySQL database.
- Established CI/CD pipelines via GitHub Actions with automated testing gates and zero-downtime VPS deployment using Nginx + Supervisor process management.

Web Developer & AI Consultant

Sep 2023 – July 2025

Freelance | Malang

- Architected a multi-modal AI mental health support system integrating Gemini API with RAG pipeline (cosine similarity), few-shot prompting, and domain-specific fine-tuning to serve a research client.
- Implemented RBAC across multi-tenant applications using Spatie Laravel Permission for 3+ user tiers with scoped data isolation.
- Diagnosed slow query bottlenecks via MySQL slow query logs and optimized server performance by tuning InnoDB configuration like buffer poolsize, max connections and PHP-FPM worker pools, resolving timeout issues on high-load reporting modules.
- Maintained 70–80% client retention rate across 15+ delivered projects spanning LMS, E-Commerce, and ERP systems for SME and academic clients.

AI Trainer (Remote)

Jul 2024 – Dec 2024

Outlier AI | Oakland

- Improved AI response accuracy by 25% through prompt engineering and RLHF techniques, ensuring contextually relevant outputs in English and Indonesian.
- Annotated over 5,000 AI-generated responses, enhancing safety and reducing error rates.
- Utilized tools such as Slack and Trello to coordinate with global teams, enhancing productivity.
- Conducted quality assurance for training datasets, ensuring compliance with project standards.

EDUCATION

Universitas Negeri Malang

2022-2025

S1 Teknik Informatika

- **GPA:** 4/4
- **Key Achievement:** Best Computer Science Graduate & Awarded Top 3 Most Outstanding Student (Mawapres) at the Faculty of Engineering for combining academic excellence with innovation.

KEY PROJECTS

MONOLENS: Edge AI Smart Glasses Translation | Python, TensorFlow, Raspberry Pi

- Built a standalone AR translation device using a custom Transformer Deep Learning model deployed on a Raspberry Pi Zero 2W, capable of offline bi-directional translation
- Achieved 92.8% accuracy and a BLEU score of ~39.9% with sub-1.3s latency by optimizing speech-to-text (VOSK) and text-to-speech synthesis.

SIMADUN: Doctoral Dissertation Management System | Laravel, MySQL, Bootstrap

- Developed and deployed the official academic management platform currently active at Universitas Negeri Malang (Dept. of Informatics) to manage complex doctoral examination schedules.
- Currently in active production use by faculty and PhD students at Universitas Negeri Malang, replacing legacy manual workflows with a centralized role-based dissertation management system.

QUANTA: AI Portfolio Intelligence Sentinel | Node.js, Gemini API, PostgreSQL

- Engineered a dual-LLM autonomous investment monitoring system (Scout + Analyzer agents) ingesting RSS feeds, live financial metrics (PBV, PER, RSI), and personal portfolio data.
- Implemented hardcoded rationality guardrails preventing reactive AI decisions, with confidence threshold filtering and cron-based self-grading that audits recommendation accuracy at 7, 14, and 30-day intervals.
- Deployed on self-hosted VPS with scheduled multi-phase agent cycles and Discord webhook delivery for real-time alerts.

HONORS, AWARDS & PATENTS

- **Patent Holder:** "Monolens: Deep Learning-Based Language Translation Model" (ID: 000558989, Aug 2024).
- **Gold Medalist & Special Award:** Indonesia Inventor Day (IID) 2024 – International recognition for AI Innovation.
- **Finalist:** 36 & 37th National Student Science Week (PIMNAS) 2023-2024 – Top-tier national research competition (Top 1% of students).
- **3rd Place (Bronze):** National Student Digital Innovation Competition (LIDM) 2024.

CERTIFICATIONS

- **IBM Full Stack Software Developer (2025) | IBM**
Completed a rigorous 15-course specialization in Cloud Native architecture, Microservices, and DevOps. Architected and deployed a scalable SaaS capstone solution using Docker, Kubernetes, and Generative AI integration.
- **Generative AI with Large Language Models (2025) | DeepLearning.AI & AWS**
Mastered the operational lifecycle of LLMs including pre-training, fine-tuning, and RLHF on AWS infrastructure. Engineered production-ready generative AI applications, deploying optimized custom models.
- **Deep Learning Specialization (2025) | DeepLearning.AI**
Completed the definitive 5-course curriculum on neural network architecture. Built and optimized CNNs, Transformers, and Sequence Models from scratch using TensorFlow for advanced CV and NLP tasks.

CORE SKILLS

Programming Languages

TypeScript, JavaScript, Java, Python, PHP, Golang, SQL.

Frontend

React.js, Next.js, TailwindCSS, Shadcn/UI, Redux, Zustand, Tanstack Query.

Backend

SpringBoot, Node.js, Laravel, Flask, MySQL, PostgreSQL, Prisma ORM, Hibernate, Redis, Firebase.

DevOps & Tools

Docker, CI/CD (GitHub Actions), Git, Postman, Vercel, GCP, Azure, linux/VPS, Sentry, Claude Code, Github Copilot.

Other

Clean code, Responsive Design, Documentation, Microservices, Agile/Scrum, LLM Fine-tuning, RAG Pipelines, Prompt Engineering.

LANGUAGES

Bahasa Indonesia (native), English (fluent)