Juan Dharmananda Khusuma

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Jakarta, Indonesia

Education

University of Indonesia, Bachelor of Computer Science   Aug 2022 – Jan 2026

- **CGPA: 3.9/4.0**; official temporary transcript available here
- **Bachelor Thesis:** Development of a Web-Based Backend Application for Grammatical Error Correction Dataset Annotation Using Agile Methodology; full report available here.

Language

Bahasa Indonesia   Native
English; IELTS ETRF available here   IELTS 7.5 (CEFR C1)

Experience

Software Engineer Intern, Universitas Indonesia Center for Legal Informatics   Jan 2025 – June 2025

- Designed and developed Lexin Chat, a legal generative-AI search web application for Indonesian legal documents.
- Cataloged and processed 60,000+ documents to build a novel retrieval dataset.
- Engineered a custom information-retrieval pipeline; technical report available here.

Software Engineer Intern, BangSoal   July 2024 – Sept 2024

- Rebuilt the entire tryout service from the ground up with minimal external dependencies to eliminate crashes on older devices caused by unsupported modern JavaScript packages, resulting in 0 recurrence of similar issues in subsequent months and reduced overall client-side errors by 25%.
- Maintained system stability during a high-traffic "Tryout Akbar" event with 200+ concurrent users by conducting load tests, optimizing database queries, and building internal admin debugging and monitoring tools to support infrastructure readiness and rapid incident diagnosis, achieving zero downtime and no service degradation.

Software Engineer Intern, PT IT Untuk Semua   Jan 2024 – Mar 2024

- Built a full-stack point-of-sale system with customer self-ordering capabilities, processing approximately 300+ transactions daily with an ordering system that facilitated 200+ customer orders per day.

Backend Engineer Intern, Core Initiative Studio   July 2023 – Sept 2023

- Led a major backend refactor, eliminating code smells, standardizing API documentation with Swagger, and introducing a custom debugging workflow, resulting in an overall "A" grade maintainability rating in SonarQube while delivering three new backend services with under 150 ms median response times.

Freelance Software Engineer, Fiverr   2020 – 2023

- Completed 100+ orders globally with 75 5-star reviews, developed over 20 full-stack applications, and delivered tutoring and mentorship in software engineering.

Highlighted Awards

1st Winner of Software Development Competition GEMASTIK XVII   Certificate Link

Developed Navigo, an integrated legal solution for MSMEs and independent creators. This AI-powered platform provides accessible and affordable legal services. Tools Used: React, Next.js, Pinecone, Gemini.

3rd Winner of IoT and Smart Devices Competition GEMASTIK XV   Certificate Link

Developed Sensa Makara, a communication tool for people with ALS or other severe motor disabilities. Tools Used: Mediapipe, OpenCV, Python, React.

Highlighted Projects

FML - Frontend Framework and Transpiler   github.com/funcml/fml_transpiler

FunML is a compiled frontend framework that lets you write UI components in a functional markup language and transpiles them at build time into plain, framework-free HTML and JavaScript. Tools Used: Haskell, TypeScript, Vite.

Empower U&I   empoweruni.com

Developed the entire backend system and GraphQL APIs for EmpowerU&I, a mental health platform for Universitas Indonesia students. Tools Used: Nest.js, Apollo, PostgreSQL.

Technologies

Languages: JavaScript, TypeScript, Dart, Go, Java, Python, Rust, SQL, Haskell.

Technologies: React, Next.js, Flutter, Express.js, Nest.js, MySQL, PostgreSQL, gRPC, Git, GCP, Kubernetes, Docker, SpringBoot, Rocket, Gin, MongoDB, Firebase, Prisma, Supabase, SQLX, Prometheus, Grafana, Elasticsearch, Pinecone.