Eldon Lim Kai Jie

eldonlimkaijie114@gmail.com | eldonlim.dev | linkedin.com/in/eldon-lim-kai-jie | github.com/EldonLim

EDUCATION

Nanyang Technological University — Singapore
Bachelor of Computing in Computer Science with Second Major in Business — *Aug 2023 – May 2027*
- Honours: Distinction

EXPERIENCE

Singapore Trade Data Exchange — May 2025 – Dec 2025
Software Engineer Intern, Digital Strategy Team — *Singapore*
- Developed full-stack features for Workforce Singapore (WSG) Platform, delivering secure RESTful APIs with custom authentication middleware and seamless frontend-backend workflows.
- Led DevOps for VesselNow, setting up AWS EC2 infrastructure and automated CI/CD pipelines with Docker, reducing deployment time by 40%.
- Optimized VesselNow's main feature request latency from 5s to 0.5s by implementing Redis Streams, boosting user experience and system responsiveness.

Technologies: AWS, Docker, Redis, PostgreSQL, Prisma ORM, TypeScript, Next.js

MSD — Sep 2024 – Feb 2025
AI Chatbot Developer (NTU veNTUre Program) — *Singapore*
- Developed an AI chatbot solution using Python and Retrieval-Augmented Generation (RAG), enabling accurate, context-aware responses for MSD's knowledge base.
- Implemented a vector database (ChromaDB) to optimize data retrieval, reducing query response times by over 50%.
- Achieved an 80% accuracy rate in prototype testing and presented the solution to MSD stakeholders, securing interest for further development.

Technologies: Python, RAG, ChromaDB, Vector Databases, Agile, Jira

PROJECTS

StudySync | github.com/EldonLim/StudySync
- Developed a cross-platform gamified study app integrating real-time features (leaderboard, chat, study streaks) to boost student motivation.
- Implemented backend services with FastAPI and Google Cloud Run, using Firebase (Firestore, Authentication, Cloud Functions) for real-time synchronization and secure user management.
- Secured $35,000 in funding from multiple startup incubators to further develop the project (ongoing).

Technologies: Flutter, Flame Engine, Firebase, Python, Google Cloud

Hospital Management System (OOP) | github.com/EldonLim/Hospital-Management-System
- Developed a hospital management system simulation in Java, implementing MVC architecture and adhering to SOLID principles for maintainable, scalable design.
- Built role-specific modules for patients, doctors, administrators, and pharmacists, enabling workflows such as appointment booking, medical records management, and prescription handling.
- Applied object-oriented programming techniques (inheritance, polymorphism, encapsulation) to simulate real-world hospital operations with extensible functionality.

Technologies: Java, MVC, OOP, SOLID Principles

JobLedger | github.com/EldonLim/Jobledger
- Developed a Chrome extension to automate job application tracking with one click, reducing manual effort and streamlining the job search process.
- Built a REST API with Flask, integrating the Google Sheets API for automated data entry and exposing secure endpoints via Cloudflare Tunnel during development.
- Deployed a production-ready backend using Waitress for concurrent request handling, ensuring scalability and reliability across multiple users.

Technologies: HTML, CSS, JavaScript, Flask, Python, Firebase, Google Sheets API, Cloudflare Tunnel, Waitress