Eldon Lim Kai Jie

(+65) 8909 4326 | eldo0001@e.ntu.edu.sg | www.eldonlim.dev www.linkedin.com/in/eldon-lim-kai-jie | https://github.com/EldonLim

EDUCATION

NANYANG TECHNOLOGICAL UNIVERSITY, SINGAPORE

Bachelor of Engineering, Computer Science with 2nd Major in Business

- Honours (Distinction), Current CGPA: 4.23/5
- Relevant Coursework Data Structures and Algorithms, Data Science and Artificial Intelligence, Object Oriented Design & Programming, Software Engineering, Database Management

WORK EXPERIENCE

Software Engineer Intern

- SGTraDex, Singapore
- Work mainly on the backend development for the WSG Platform, a system designed to streamline coordination between Workforce Singapore (WSG), WSS, and partner companies, acting as a digital bridge for job support processes.
- Designed and implemented secure RESTful API endpoints using TypeScript and Next.js, with custom middleware for authentication and access control, ensuring data privacy and system integrity.
- Created and optimized relational database models with Prisma ORM and PostgreSQL, supporting scalable and efficient data management across multiple user roles.
- Contributed to frontend development using Next.js, ensuring a cohesive and responsive user interface experience.

AI Chatbot Developer

MSD, Singapore

- Developed an advanced AI chatbot solution leveraging Python and Retrieval-Augmented Generation (RAG) methodology.
- Managed tasks using Agile methodologies and Jira boards, ensuring efficient project execution.
- Designed and implemented a robust vector database to optimize data retrieval processes.
- Achieved an 80% accuracy rate and presented the AI chatbot solution to stakeholders.

AI Chatbot Developer

Nanyang Technological University, Singapore

- · Constructed an LLM-based chatbot application to evaluate the accuracy of another LLM system in answering curated questions related to NTU policies.
- Implemented advanced techniques such as Retrieval-Augmented Generation (RAG), LangChain, and Large Language Models (LLMs) to enhance chatbot performance and reliability.
- Established a scoring mechanism to assess and improve the response quality of the chatbot, ensuring accurate and relevant answers to staff queries.

Research Assistant

Nanvang Technological University, Singapore

- Implemented an innovative exercise for students to mine Google reviews using Python Selenium.
- Created a script to scrape reviews and analyze them with Excel tools and sentiment analysis techniques.
- Produced a comprehensive technical guide to enable students to replicate the process independently.

ACHIEVEMENTS

NTU Multidisciplinary Team (MDT) Fund - \$10,000 Awarded

- Secured \$10,000 MDT fund by pitching against NTU students, alumni, and staff.
- Led development of an edtech app aimed at making studying immersive and addictive like social media.
- · Coordinated with team members and freelancers by communicating specifications, managing expectations, and ensuring timely deliverables.
- Conducted user and market research, facilitated design sprints, and led ideation workshops.
- Collaborated with NTU faculty and startup mentors to validate concept and prepare investor pitch.
- Received strong feedback for novelty and potential social impact, strengthening entrepreneurial leadership.
- Responsible in frontend and backend integration using Flutter, Firebase, and PostgreSQL.

NTUpreneur GET Innovation Grant - \$5,000 Awarded

- Awarded \$5,000 innovation grant through NTU's Growing Entrepreneurial Talents (GET) program.
- Led proposal and vision for a startup gamifying study motivation using behavioral design principles.
- · Coordinated with mentors, business advisors, and technical teammates to refine prototype and business model.
- Oversaw budgeting, resource planning, and development milestones for project execution.
- Gained experience turning ideas into actionable roadmaps and building early user traction.

May 2025 – Dec 2025 (ongoing)

Aug 2023 – May 2027 (Expected)

Aug 2024 – Dec 2024

Sep 2024 – Feb 2025

May 2024 – Aug 2024

May 2025

May 2025

NUS Hack&Roll – Top 9 Winner

- Developed an innovative gamified study app enabling seamless interaction between users across different devices.
- Led frontend development (70%) using Flutter, designing an intuitive and responsive user interface.
- Designed and implemented the entire backend architecture using Firebase, ensuring scalability and reliability.
- Integrated real-time data synchronization and cross-platform compatibility using Firebase backend solutions.
- Delivered a compelling pitch to a panel of 10 judges, receiving positive feedback for creativity and execution.

PROJECT WORK

Job Application Tracker

- Deployed a Chrome extension using HTML, CSS and JavaScript that automates job application tracking with a single click, streamlining the job search process.
- Built and implemented a REST API using Python and Flask, integrated with the Google Sheets API to append data to a personalized job tracking sheet.
- Exposed backend endpoints to the internet using a Cloudflare Tunnel running from a local server, enabling secure external access during development and early testing phases.
- Designed a Firebase database to manage user-specific data securely and efficiently across multiple users.
- Delivered a production-ready product using the Waitress package for concurrent request handling, enabling seamless usage by multiple users simultaneously.

App Development for National Cash Flow Competition 2025

- Developed a financial board game application using Flutter for the National Cash Flow Competition 2025, aiming to promote financial literacy among 800 students across Singapore in a fun and engaging way.
- Collaborated with a team of 3 students to brainstorm and design the overall structure and user experience of the application.
- Designed key features of the app, focusing on gameplay mechanics, user interface, and financial concepts, utilizing Flutter to ensure cross-platform compatibility.

Hospital Management System (OOP)

- Built a hospital management system simulation using Java, adhering to the MVC (Model-View-Controller) architecture and SOLID design principles.
- Designed role-specific interfaces for patients, doctors, administrators, and pharmacists, enabling seamless user interactions.
- Designed the system to simulate real-world hospital operations, enhancing functionality and user experience through robust object-oriented programming techniques.

Work Study Scheme Data Scraping and Telegram Notification

- Used Python to scrape data from NTU school's intranet to monitor new job postings in the Work Study Scheme portal.
- Developed a Telegram bot to send notifications directly to my Telegram account when new jobs are available.
- Automated the job search process, reducing the need to log in and check for updates manually.

LEADERSHIP EXPERIENCES / CO-CURRICULAR ACTIVITIES / COMMUNITY SERVICES

NTU Interactive Investment Club Software Developer

- Worked with a diverse team and organizing committee to translate competition goals into engaging digital features.
- Gathered and applied user feedback to enhance gameplay mechanics, interface design, and educational effectiveness.
- Successfully deployed the app for the live competition, which ran smoothly and received positive feedback from both participants and event organizers.

NTU Rotaract Club

Professional Development Division, Sub-committee

- Gathered and applied user feedback to enhance gameplay mechanics, interface design, and educational effectiveness.
- Volunteered for the Brickland Achievers' Club to School program to support and motivate low-income primary students in their education.
- Supported the planning and hosting of career talks aimed at enhancing professional awareness among NTU students.

SKILLS & INTERESTS

- Languages: Fluent in Spoken English, Mandarin, Malay; Competent in Written English, Mandarin, Malay
- Programming: Python, C, HTML, CSS, Java, JavaScript, SQL, Dart (Flutter), TypeScript
- Web & App Development: React, Next.js, Vite, Node.js, Flutter
- Libraries and Frameworks: Flask, NumPy, Pandas, Matplotlib, LangChain, Selenium
- Database & Storage: PostgreSQL, Firebase, ChromaDB, Vector Stores
- Tools & Technologies: Docker, Google Cloud Run, Cloudflare Tunnel, Git, Jira, Clickup
- Interests: Participating in hackathons; Volunteering at charity events and non-profit organizations; Badminton

July 2024 – Dec 2024

Oct 2024 – Nov 2024

June 2024

Aug 2023 – May 2024

Aug 2024 – July 2025

Jan 2025

Dec 2024