Isa Bin Mohamed Yamin

+65 9722 7498 | ISA001@e.ntu.edu.sg | https://isayamin.com | https://github.com/boiwantlearncode

EDUCATION

Nanyang Technological University   Singapore
Bachelor of Engineering in Computer Engineering, Second Major in Data Analytics   *Aug. 2023 – Present*
- Dean's List (AY 2023-2024)
- Relevant courses: Data Science & Artificial Intelligence, Linear Algebra for Computing, Data Structures & Algorithms, Operating System, Software Engineering, Object-Oriented Programming, Database Systems

ACADEMIC PROJECTS

Property Search Recommendation Web Application | *Next.js, Typescript, Supabase, PostgreSQL*   2025
- Implemented interactive vector map using Mapbox that displays property listings and other facilities sourced from external APIs and scraped from websites.
- Designed and planned the system architecture using software modeling tools such as use case diagrams and descriptions, sequence diagrams, and the MVC design pattern to ensure clarity and scalability.
- Led a team of developers in adopting Agile methodology with periodic sprints and retrospectives.

ARM-based Microcontroller Development (MSP432) | *C*   2024
- Developed an embedded system using C on the MSP432 LaunchPad to control a self-navigating robot on a black-line course with obstacle detection via bump sensors and infrared sensors
- Implemented a finite state machine (FSM) to manage robot behavior in real-time across various states such as line-following, obstacle avoidance, and idle/reset

Hospital Management System CLI | *Java, Git*   2024
- Collaborated with a few peers to develop a command line interface that implements authentication, provides varied functionalities based on the role of the user, and enforces data persistence
- Designed the UML diagram, and maintained changelog and documentation

Water Sort Puzzle AI | *Python, Pandas*   2024
- Developed an AI program that solves randomized water sort puzzles using 7 search algorithms such as A*.
- Implemented an automated performance analysis on the various search algorithms to determine most efficient algorithm.

PERSONAL PROJECTS

Open Source React UI Library | *Typescript, React, Next.js, TailwindCSS, Git, Lerna, Figma*   2024
- Published an open-source React component library, *@crease/react*, that enables developers to implement various types of interactive quizzes to *npmjs*.
- Maintained comprehensive documentation at https://crease.dev to assist developers in integrating and using the package

Mobile App - HTML Editor | *React Native, Expo, SQL, Typescript, Figma*   2024
- Designed and built a cross-platform mobile app that comes with a code editor that compiles HTML, CSS and Javascript languages
- Added auto-completion and auto-suggestion features into the code editor as well as real-time viewing of the code output
- Utilized state management, local storage data persistence with SQLite, and routing

Firefox Browser Extension - Multiple Bookmarker | *HTML, CSS, Javascript*   2023
- Published a browser extension that lets the user select and bookmark multiple tabs simultaneously into a specified folder
- Interacted with other developers through Github Issues for feedback and improvement
- Received 6 stars on Github and has more than 40 daily users

TECHNICAL SKILLS

Languages: English, Malay, Indonesian, Typescript, Javascript, Python, Java, C, C++, SQL, Verilog, Go
Technologies: Git, Docker, Next.js, React, React Native, Svelte, Flutter, PostgreSQL (Supabase), MySQL, SQLite, Flask, Node.js, Express, Figma