

Highly motivated, diligent, and driven undergraduate pursuing Computer Science at Singapore Management University. Equipped with programming languages and data structures and algorithm knowledge, willing to take on ambitious projects and embrace challenges.

Experiences

Software Engineer Intern, Azendian Solutions

May 2023 – August 2023

- Developed scalable APIs for an application using Express.js and integrated them with Azure and PostgreSQL database.
- Performed DevOps tasks on Linux environments to ensure seamless deployment and monitoring on local servers.
- Utilized Git and JIRA for effective communication and justify design decisions to colleagues and superiors.
- Designed a robust backend from scratch, ensuring seamless integration with existing services.
- Documented backend architecture, code design, and design decisions in a comprehensive Developer's Guide using UML.
- Optimized codebase to enhance performance and memory management in line with project requirements.
- Acted as a Full-stack Software Engineer, proficiently handling both frontend and backend responsibilities.

Research Assistant (Autonomous Vehicle Algorithm Testing), Singapore Management University

June 2023 – August 2022

- Conducted rigorous testing of edge cases within an autonomous vehicle framework, using Apollo with the LGSVL simulator.
- Proficiently engaged with the source code of the Apollo Autonomous Driving System to identify potential hazards and problems.

Administrator, Top Taekwondo Academy

May 2021 – May 2022

- Assumed responsibility for maintaining seamless day-to-day operations within the company.
- Expertly managed ad-hoc administrative tasks, including the compilation of Excel spreadsheets and attendance records.
- Spearheaded the conceptualization, design, and production of various impactful marketing collaterals, including the present banner for Top Taekwondo Academy Serangoon and a discrete marketing video.

Autonomous Electric Vehicle Intern, Singapore Polytechnic Electrical and Electronic Engineering

March 2020 – August 2020

- Enhanced vehicle performance and algorithmic efficiency, enabling autonomous steering through the implementation of the Autonomous Navigation feature.
- Programmed the electric vehicle utilizing the Robot Operating System (ROS), resulting in seamless autonomous maneuverability.
- Pioneered the development of a proprietary driving formula, optimizing the car-driving system for superior performance and control.

Education

Bachelor's Degree in Computer Science, Singapore Management University

August 2021 – Present

- Data Structures and Algorithm, Object Oriented Programming, Software Development, Databases, Hardware and Embedded System, Operating Systems, Machine Learning

Diploma in Computer Engineering, Singapore Polytechnic

April 2018 – May 2021

- Programming Fundamentals, Computer Hardware, Embedded System, Microcontrollers

Notable Projects

Asset Management System (ABS)

January 2023 – May 2023

- Collaborated with a team to create Minimum Viable Product (MVP) to elevate tracking and asset management capabilities for school clubs in a tight deadline.
- Constructed an intuitive Frontend using VueJS, seamlessly integrating Git and Scrum methodologies for an efficient workflow.
- Orchestrated project management through the Jira Ticketing system, ensuring precise task tracking and seamless coordination.

Bussin Carpooling App

August 2022 – November 2022

- Designed a carpool service prototype, leveraging private car efficiency to mitigate peak-hour traffic congestion, and seamlessly merging public transport and ride-hailing options. Employed Agile methodology for streamlined development.
- Collaborated seamlessly within a Scrum team, utilizing Git workflow, to architect Bussin's core through the Spring framework.
- Garnered recognition by winning the prestigious Credit Suisse Outstanding Project Award.

Singapore Polytechnic IoT Vertical Farming

April 2020 – June 2020

- Debugged the existing software that is used to control the vertical farm.
- Represented Singapore Polytechnic and was awarded the Lee Hsien Loong Interactive Digital Media Smart Nation Award 2020.

Co-curricular Activities

Honorary General Secretary, SMU Whitehat Society

August 2022 – August 2023

- Provided comprehensive administrative support to the club, encompassing tasks such as crafting email blast messages, compiling records for official documentation, and generated meeting minutes, contributing to club's seamless operations.

Quarter Master/Executive Committee

July 2018 – January 2020

- Meticulously oversee the management of club properties and maintain a consistently tidy club room environment.
- Successfully orchestrated over 12 events in collaboration with fellow committee members.
- Chairperson for the International Students' Freshmen Orientation Program, leading the strategic planning and meticulous execution of the program's activities.

Skills

Java, Python, JavaScript, ReactJS, VueJS, ExpressJS, Docker, MySQL, PostgreSQL, MongoDB, AWS EC2, AWS Lambda, Figma, C/C++, Git/GitHub, Microsoft Excel/Word, Adobe Premiere Pro/Photoshop