

SAMUEL TAN SZE WEE

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EDUCATION

National University of Singapore

Aug 2021 - Jul 2025

Bachelor of Engineering in Computer Engineering

- Minor in Data Engineering
- Relevant course work: CS2113 Software Engineering & Object-Oriented Programming (A), CS2102 Database Systems (A), EE4204 Computer Networks (A), CS2107 Introduction to Information Security (A-)
- GPA: 4.43 / 5.0

SKILLS

- Technical: Microsoft Power BI, Excel Macro (VBA), C/C++, Java, HTML & CSS, Javascript, Bootstrap 5, NodeJS, ReactJS, ExpressJS, EJS, MongoDB, MongooseJS, PostgreSQL, Git, Python, Verilog Hardware Description Language (HDL), AWS EC2, AWS Parallel Cluster

WORK EXPERIENCE

Project Officer, RSAF, HQ Air Force Supply Centre

May 2023 - Jul 2023

- Streamlined data extraction from various Excel Spreadsheets through the implementation of an Excel Macro (VBA), resulting in a significant improvement in the accuracy of extracted data and reduction in staff data retrieval time
- Automated the generation of Microsoft Outlook emails with dynamic content derived from the extracted data, thereby optimizing communication efficiency
- This initiative has the potential to save up to 4 hours of man-hours per week
- Additionally, documented VBA codes in a Word document to enhance the sustainability and portability of the program
- This experience underscored the significance of effective communication, as it required me to gather user feedback and subsequently adapt and modify the program accordingly

Project Officer, RSAF, Air Engineering & Logistics Department (AELD)

May 2022 - Jul 2022

- Designed a user-friendly GUI form using Python's Tkinter framework to collect essential user parameters necessary for the execution of a backend Python program simulating aircraft faults

Project Officer, The Republic of Singapore Air force (RSAF)

Dec 2020 - Jul 2021

- Utilized Microsoft Power BI to analyse and visualize fault data, developing interactive dashboards for tracking fault trends, identifying trend patterns, and providing actionable insights to support data-driven decision-making

PROJECTS

Personal Website

Jan 2024 - Present

- Created a personal website utilizing ReactJS, HTML, and CSS to enhance and exhibit my frontend proficiency
- This project not only served as a valuable practice ground but also played a pivotal role in solidifying my frontend expertise, breaking through the confines of tutorial-centric learning

CG2271 Real Time Operating System Group Project

Aug 2023 - Nov 2023

- Constructed a remote-control car together with 4 other group members by applying Real-Time Operating System (RTOS) knowledge gained during the semester
- Employed mutex and semaphores from the Keil RTX library to schedule the car's actions, showcasing practical implementation of RTOS concepts

CS2113 Group Project**Feb 2023 - Apr 2023**

- Collaborating with my group, we developed a command-line interface (CLI) money manager application using Java, capable of executing CRUD operations on user expenses and income
- Implemented local storage to preserve data upon program exit
- Performed JUnit testing on most of the methods utilised in the project
- Leverage Git and GitHub facilitated code synchronization and version control
- Throughout the project, I acquired valuable insights into creating thorough user and developer guides using Markdown, integrating UML diagrams for enhanced clarity
- Additionally, I demonstrated effective teamwork by providing assistance to team members facing challenges

CO-CURRICULA AND VOLUNTEER EXPERIENCE

Member, TOUCH Young Arrows (TYA)**Aug 2019 - Aug 2021**

- Volunteered at TYA, consisting of a team of volunteers conducting weekly Saturday programmes to meet children emotional, social and educational needs