

TAY YING XU DEMPSTER

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SKILLS

- Languages: Java, Python, Javascript, SQL, HTML, CSS
- Frameworks: Next.js, React, React Native, Tailwind CSS, MySQL
- Tools: Firebase, Git, Figma, Material UI, SCSS, Google Tag Manager

EDUCATION

National University of Singapore (NUS)

Aug 2021 - Apr 2025

Bachelor of Computing in Information Systems

Cumulative Average Points: 4.35 / 5.00

Coursework: Object-Oriented Programming, Functional Programming, Data Management and Visualisation, Enterprise Systems Server Architecture & Interface Design and Development, Data Structures and Algorithms

EXPERIENCE

SISTIC Singapore, Product Engineer Intern

May 2023 - Present

- Facilitated the revamp of the company portal, utilising React, SCSS and MUI to implement new features such as an events visit planner and fixed numerous bugs, driving up site traffic by 15%
- Implemented a pivot table with real-time data using React and RESTful API consumption, resulting in a 60% increase in operational efficiency for the business development team's pricing decisions
- Created and managed triggers in Google Tag Manager, enabling data analysis on Google Analytics; refactored React code to implement triggers, allowing for data-driven marketing and improved user insights

National University of Singapore, Teaching Assistant

Aug 2023 - Present

- Lead weekly tutorial sessions for 14 students, enhancing their grasp of Java Fundamentals
- Developed and taught classes on problem-solving methodologies, algorithm design, testing, debugging, programming constructs, data structures, sorting, and recursion
- Assisted in grading assignments and provided constructive feedback to foster student growth

NUS Computing Club, Director of Partnerships (Student Life)

Aug 2022 - Jul 2023

- Cultivated strategic partnerships with companies, expanding the club's network and resources
- Facilitated a 25% increase in club funding by securing sponsorships from partner companies
- Conducted regular meetings and discussions with partners to identify collaborative opportunities

PROJECTS

Infinite Carpool, Corporate Carpooling Web Application

May 2023

- Tech Stack: React, Javascript, CSS, Firebase
- A web application that connects employees within a company, facilitating easy coordination and group formation for carpooling
- Frontend developed using React and CSS
- Backend and User Authentication developed with Firebase
- Utilised Git Feature Branch Workflow to manage workflow between developers
- Attained Top 4 at LifeHack 2023 Hackathon

flash!, Rock Climbing Social Media Mobile Application

May 2021 - Aug 2021

- Tech Stack: React Native, Javascript, CSS, Firebase, Jest
- Users can post videos of their rock climbing betas (instructions) onto the application, follow other users, like and comment on posts
- Frontend built using React Native and CSS
- Backend and User Authentication developed with Firebase
- Unit testing using Jest

Portfolio Website, Web Application

Oct 2023

- <https://dempster.vercel.app/>
- Tech Stack: Next.js, Tailwind CSS
- Designed in Figma and hosted on Vercel