

Dempster Tay

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EXPERIENCE

Product Engineer Intern

May 2023 – Present

SISTIC Singapore

- Facilitated revamp of 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 35% quarter over quarter
- Implemented a pivot table with real-time data from RESTful API consumption using React and Express.js, resulting in a 60% increase in operational efficiency for Business Development team's pricing decisions
- Enhanced company portal's Content Management System (CMS) using PHP and Drupal, complementing the portal revamp
- Undertook Scrum Master responsibilities and assisted in sprint planning while practising Agile methodology

Teaching Assistant

Aug 2023 – Present

National University of Singapore

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

Director of Partnerships (Student Life)

Aug 2022 – Jul 2023

NUS Computing Club

- Cultivated strategic partnerships with 3 different companies, expanding club's network and resources
- Generated a 25% increase in club funding by securing sponsorships from partner companies
- Conducted regular meetings and discussions with partners to identify collaborative opportunities

EDUCATION

National University of Singapore (NUS)

Aug 2021 – Apr 2025

Bachelor of Computing in Information Systems

- **Grade Point Average:** 4.35 / 5.00 (Upper Second Class Honours)
- **Coursework:** Object-Oriented Programming, Functional Programming, Data Management and Visualisation, Enterprise Systems Server Architecture & Interface Design and Development, Data Structures and Algorithms

TECHNICAL SKILLS

Languages: Java, Python, Javascript, PHP, SQL, HTML, CSS

Frameworks: React, React Native, Express.js, MySQL, Drupal

Developer Tools: Node.js, Firebase, Git, Jest, Figma, Material UI, SCSS, Google Tag Manager

PROJECTS

Infinite Carpool | *React, Javascript, CSS, Firebase*

May 2023

- Developed a web application that connects employees within a company, facilitating easy group formation for carpooling, and determines the shortest travel path to the office
- User Authentication done using Firebase
- Practiced Git Feature Branch Workflow to manage workflow between developers
- Attained Top 4 at LifeHack 2023 Hackathon

Flash! | *React Native, Javascript, CSS, Firebase, Jest*

May 2021 – Aug 2021

- Developed a cross-platform social media mobile application for rock climbers to post videos of their rock climbing betas (instructions), follow other users, and also like and comment on other users' posts
- Frontend built using React Native and CSS
- Backend and User Authentication done using Firebase
- Unit Testing implemented with Jest

Portfolio Website | *Next.js, Tailwind CSS*

Oct 2023

- <https://dempster.vercel.app/>
- Designed in Figma and deployed using Vercel