

Dempster Tay

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EDUCATION

National University of Singapore (NUS)

Aug 2021 – Apr 2025

Bachelor of Computing in Information Systems

- **Grade Point Average:** 4.36 / 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

EXPERIENCE

Product Engineer Intern

May 2023 – Dec 2023

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
- Undertook Scrum Master responsibilities; wrote **Jira** issues and assisted in sprint planning while practising **Agile** methodology

Teaching Assistant

Aug 2023 – Nov 2023

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

PROJECTS

Carpooling & Routing Web App | *React, Javascript, CSS, Firebase* | Github Link

May 2023

- 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

Social Event Platform | *Java EE, PrimeFaces, Glassfish, MySQL* | Github Link

Feb 2022 - Apr 2022

- School events finder social media web application for students to easily post, discover, comment, and indicate attendance to school events
- Frontend built using Java EE and PrimeFaces
- Backend built using Glassfish, **MySQL** and Java Persistence API with data validation

Social Media Mobile App | *React Native, Javascript, CSS, Firebase, Jest* | Github Link

May 2021 – Aug 2021

- Mobile cross-platform social media application for rock climbers to post videos of their rock climbing betas (instructions), follow other users, 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**

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, SQL, HTML, CSS

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

Developer Tools: Node.js, Firebase, Git, Jest, Figma, Material UI, Tailwind CSS, SCSS, Jira