

# TAY YING XU DEMPSTER

+65 98523966 • dempster.tay@u.nus.edu • [www.linkedin.com/in/dempstertay](https://www.linkedin.com/in/dempstertay)

## SKILLS

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- Languages: Java, Python, Javascript, SQL, HTML, CSS
- Frameworks: React, React Native, MySQL
- Others: Firebase, Git, Figma, Material UI, SCSS, Google Tag Manager

## EDUCATION

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**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 (OOP) and Functional Programming, Data Management and Visualisation, Enterprise Systems Architecture & Server-Side & Interface Design and Development, Data Structures and Algorithms

## EXPERIENCE

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**SISTIC Singapore, Product Engineer Intern**

**Feb 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

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**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