

# Tan Ye Quan

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Website: [yequan99.github.io](https://yequan99.github.io) | Availability: Aug 2023 – Dec 2023 (Part Time)

## EDUCATION

### Nanyang Technological University, Singapore

August 2020 – May 2024 (Expected)

- **Bachelor of Engineering (Computer Science)**
- Expected Honours (Second Upper) GPA: 4.24/5.00
- Relevant modules: Data Structures and Algorithm, Software Engineering, Object Oriented Design and Programming, Database System Principle, Algorithm Design and Analysis, Operating Systems, Data Science and Artificial Intelligence, Computer Networks, Natural Language Processing, Computer Security

## EXPERIENCE

### Government Technology Agency

Jan 2023 – July 2023

#### Software Engineering Intern

- Built an automated process for migration of project repositories using GitLab CI/CD pipeline and ChatOps
- Developed a maturity report to ensure projects comply to industry DevSecOps best practices, using NextJS and Golang

### MANN+HUMMEL Ventures Pte Ltd

May 2022 – July 2022

#### Software Engineering Intern

- Spearheaded the development of Data Input Tool website that is hosted on an AWS ec2 instance (centOS) linked to AWS RDS Postgresql database using Django Framework (HTML, CSS, Javascript, Python)
- Applied agile methodology during projects, ensuring deliverables are met at the end of each sprint cycle
- Analysed trends and identified key features that made machine learning model outperform workers' prediction in stocking up inventories

## ACADEMIC PROJECTS

### Advanced Software Engineering Project (Recipely)

August 2022 – November 2022

- Developed a web application using React and Nodejs with MySQL database
- Allows the user to keep track of their food inventory and suggest recipes based on their food inventory using Spoonacular API

### Natural Language Processing Project

August 2022 – November 2022

- Successfully built an application to do sentimental analysis and classification on tweets on Tesla with models like RoBERTa, VADER and XGBoost with an accuracy of 87.6%
- Spam and objectivity detection was applied to sieve out relevant data before applying subjectivity detection

### Multi-Disciplinary Design Project

August 2022 – November 2022

- Developed Hamiltonian Path with Shortest Path Algorithms for the robot to move through a 20x20 grid to avoid obstacles and detect required images
- Established server-client network connection with Raspberry Pi via Socket Programming to send over movement commands to the robot via the Raspberry Pi

## HACKATHONS

### NTU-AI4IMPACT Chatbot Datathon 2021 (Finalists)

June 2021 – July 2021

#### Title: Chatbot for Insurance Institution

- Built a chatbot function (with Smojo Language) to obtain customer information requirements to help fill in application forms to be submitted to the Insurance Company

### IET-NTU Data Analytics Case Challenge 2021 (Finalists)

March 2021 – April 2021

#### Title: E-commerce Analytics

- Conducted statistical analysis of data using Python to understand customers better such as evaluating conversion rate and retention
- Performed segmentation analysis of customers based on behavioural data (procedures like clicking an item, adding to favourites, adding to cart)

## LEADERSHIP & CO-CURRICULAR ACTIVITIES

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**Nanyang Technological University, Singapore**

**Financial Controller (Freshman Orientation Programme)**

**September 2022 – September 2023**

- Responsible for all monetary transactions and claims procedures for Hall 15's FOP
- Ensured consistency and accuracy of balance sheets and budgeting managements

**Nanyang Technological University, Singapore**

**Sports Director, 21<sup>st</sup> Hall Council (Hall of Residences 15)**

**August 2021 – September 2022**

- Manage and coordinate between the captains of the various sports CCAs for trainings
- Planning and executing events for residents of the Hall together with the other Council Executives

## SKILLS

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**Languages:** English, Mandarin

**Programming:** Python, C, Java, HTML/CSS, Javascript, Typescript, Golang

**Frameworks:** Django, ReactJS, NodeJS, NextJS

**Skills:** Git, Bitbucket, SQL(MySQL, Postgresql), GitLab, Docker

**Online Courses:**

Using Database with Python (Coursera), Introduction to SQL (Coursera), Docker for Beginners (Udemy)