

# Kevin Pek Yue Ting

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## EDUCATION

### National University of Singapore (NUS)

Aug 2021 – Current

- B.Sc Data Science and Analytics (Hons), Second Major in Computer Science
- Cumulative Average Point: 4.64/5.00
- Achieved Dean's List in AY22/23 Semester 1.

### Hwa Chong Institution

Jan 2013 – Dec 2018

- **H2:** Physics (A), Mathematics (A), Chemistry (A), Economics (B)
- **H1:** General Paper (B), Project Work (B)

## SKILLS

- Programming Languages: Python, TypeScript, Java, R, C
- Frameworks: React, Express, FastAPI, Flask
- DevOps: Docker, Git
- Cloud Platforms: GCP (Cloud Build, Cloud Run), AWS (S3)
- Proficient in English and Mandarin (Spoken, Written)

## WORK EXPERIENCE

### NUS IORA – Student Researcher

Mar 2022 – Current

- Built web applications for a learning platform with content and user management features using React (MUI) and Express, as well as Flask and Jinja2, utilising MySQL and AWS S3 cloud storage.
- Implemented online machine learning algorithms in Python (contextual bandits, sklearn, pandas libraries) for a multi-armed bandit problem.
- Deployed said algorithm as an API using the FastAPI framework for use with other applications.
- Containerised applications for use in test environment using Docker and Docker Compose.

### Idemia – Full Stack Intern

May 2022 – Aug 2022

- Collaborated in a team of 3 to develop a prototype application for microservice orchestration using Apache Camel and Spring Boot.
- Wrote integration and unit tests for applications using the Testcontainers library and Junit5 framework.
- Optimised inefficient code involved in fetching data from Apache Kafka in several microservice applications, resulting in a 10x reduction in network bandwidth usage.

### NUS Department of Biomedical Engineering – Student Developer

Feb 2022 – May 2022

- Developed an interactive quiz application that automatically logs data in Google Spreadsheets using the Unity Game Engine, to assess the cognitive skills of persons suffering from Alzheimer's Disease.

### Defence Science and Technology Agency – Modelling and Simulations Intern

Mar 2021 – Jun 2021

- Built high fidelity simulation environments on Unity for Reinforcement Learning projects and wrote detailed documentation.
- Utilised the ML Agents package on the Unity Engine to train and package Deep Learning models for 2 Reinforcement Learning projects.

## EXTRACURRICULAR ACTIVITIES

### NUS Google Developer Student Club – Software Engineer (Backend)

Sep 2022 – Current

- Developed the backend services for a campaign management system, and a payment service to process donations from various payment providers using MongoDB and Express.
- Wrote unit tests in Cypress and setup automated CI/CD pipeline on GCP using Cloud Run and Cloud Build.

### 42<sup>nd</sup> NUS Rovers Adventure Club – Honorary General Secretary

Oct 2021 – Oct 2022

- Demonstrated leadership by helping local and overseas expeditions for trekking and cycling events.
- Exemplified organisational skills by managing and maintaining the membership database of the club events.

### NUS Student Union IT Committee, CharITeach – Volunteer Tutor

Mar 2022

- Taught underprivileged students basic coding skills through the process of learning how to make a game using the Scratch programming language.
- Took initiative to tailor concepts taught for children to help them learn better.