

# Chuan Wei Tan

Singapore | [LinkedIn](#) | 97230422 | [chuanwei98@gmail.com](mailto:chuanwei98@gmail.com)

## EDUCATION

### Queen Mary University Of London

BSc Computer Science (First Class Honours)

London, UK

August 2020 - June 2023

- Key Courses: Security Engineering, Compilers, Web Development, Big Data Processing, Multi-Platform Game development, Machine Learning and Neural Networks, Compilers

## PROJECTS

### City Traffic Simulation

London, UK

Dissertation

May 2023

- Created a structure and placement system and user interface to allow for the construction of a city and roads using the **Unity Engine**, **C#**, and **Git** for version control.
- Built a grid and pathfinding system, using the A\* search algorithm, and a marker system for vehicles, and pedestrians to accurately navigate traffic.

### Unity, C# Video Game

Singapore

Personal Video Game project

December 2022

- First Person movement shooter, roguelike project being built in Unity Engine.
- Built existing systems, Enemy AI, Weapon Mechanics, Item interactions, User interface, Animation.
- Used Shader graphs, Blender, Aesprite, Probuilder, URP, Post-processing filters.
- Github and Code documentation done within a small team.

### Java Compiler

London, UK

Compilers

December 2022

- Wrote a **parser**, **lexer** and coded an **Abstract Syntax Tree** in Java to create a custom compiler.
- Used MIPS Assembly code for code generation

### Big Data Processing

London, UK

Student Project

December 2022

- Queried 2TB of cryptocurrency scam data from **AWS S3** using **PySpark**, utilising a MapReduce approach to transform the data for analysis.
- Analysed the data, providing summary statistics as well as visualisations for variables of interest.

### Blog Website Creation

London, UK

Student Coursework

March 2021

- Built a blog website with a login page, allowing users to create an account, as well as create blog posts, using **PHP** and **SQL** to handle the transfer of data to a database as well as its storage.
- Created a frontpage for the website using **CSS** and **HTML** as well as a user interface to allow navigation of the site using Javascript.

## WORK AND LEADERSHIP EXPERIENCE

### Queen Mary University of London

London, UK

Teaching Assistant

September 2022 - December 2022

- Taught students Java procedural programming by assisting them with their tutorial work and also marking their code while providing guidance.

### Super Smash Bros. Singapore

Singapore

Community Leader

January 2015 - January 2021

- Sourced venues and various sponsors such as Prism, Nintendo, Capcom, ArcSystemWorks to run fighting game tournaments with various prizes.
- Ran the largest fighting game event in Southeast Asia (SEAM) with a total of 100 entrants with over 30 different countries participating.

### Singapore Armed Forces

Singapore

Human Resource Management

August 2018 - August 2020

- Managed manpower strength within the government using Microsoft Excel and coded macros using VBA to automate the manpower selection process.
- Tracked personnel status and coordinated communication between multiple government faculties.

### Sembcorp Industries

Singapore

Process Engineer Intern

September 2017 - February 2018

- Sourced materials to build a pilot plant and tested the new automation systems that were going to be implemented in future plants.
- Learned **Python** to aid in the testing and programming of the automation systems used.

## SKILLS

**Languages:** Python, C#, C++, Javascript, PHP, SQL, CSS, HTML, Java, Assembly, Git

**Software:** Microsoft Office, MIPS, Unity, Unreal Engine, Photoshop **Spoken Languages:** English, Mandarin(Fluent), Japanese (Low level)