

ALWIN MOO

Computer Science (Real-Time Interactive Simulation)

+65 91911853

alwinmoo@proton.me

[alwinmoo.github.io](https://github.com/alwinmoo)

WORK EXPERIENCE

ST Engineering
May 2025–Apr 2026

Software Engineer (Internship)

- **Optimised**, redesigned, modernised underlying architecture of simulation program–Computer Generated Forces, used by multiple large MNC customers following **Agile methodology**. Product used **C++** with **multithreading**, **networking**, and **software design patterns**.

Helloholo
Mar 2020–Jul 2020

Mixed Reality Developer (Full time)

- Developed solutions for clients on the Hololens 2, Azure Kinect DevKit, and RealWear HMT-1, on **Unity** under tight deadlines.
- Helped four high-value clients digitise workflows during lockdown.
- Wrote articles and copy-writing for company’s website, advertising platforms, and voice-over scripts. Increasing the quality of company’s marketing material.

EDUCATION

Digipen-
Singapore Institute
of Technology
Aug 2022–May 2026

BSc Computer Science (Real-Time Interactive Simulation)

- Made two game engines in C++ with **OpenGL** and **Vulkan** from scratch as a graphics and scripting programmer over the course of three months.
- Studied C++, **Cuda C**, multithreading, **data structures**, **algorithms**
- Exchange student at Digipen Institute of Technology Bilbao

Nanyang
Polytechnic
Apr 2017–Feb 2020

Diploma in Game Development and Technology

- Graduated with GPA of 3.52/4.00
- Studied fundamentals of C/C++ with OpenGL, **project management**
- Worked on 3D Unity game about local Taiwanese folk religion when on exchange with Taiwan University of Maritime Technology.

PROJECTS

Personal project
2025–present

Gameboy Assembly Roguelike

- Bringing a “Hades”-like experience to the original gameboy. Giving players a sense of excitement and healthy anxiety.
- Writing a clean and efficient **assembly** game engine with ideas adapted from object oriented programming.

School project
Sep 2024–Apr 2025

Game project OpenGL graphics programmer

- Worked with a team of 10 others to make a 3D game and game engine from scratch.
- I was in-charge of the graphics and used modern OpenGL. Features included a UI system, skinned animations, PBR rendering and shadows.

SKILLS

Personal

Creative Writing skills
Leadership skills
Management skills
Public speaking
Project management
Agile development

Professional

C/C++, C#, GB z80 assembly
Python, Java
Git/VCS
OpenGL/Vulkan
Homelab networking/Docker
Linux