# ALWIN MOO

Computer Science (Real-Time Interactive Simulation)

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## WORK EXPERIENCE

ST Engineering
May 2025-Apr 2026

**Software Engineer (Internship)**

- Redesigned and modernised underlying architecture of simulation program used by the Republic of Singapore Armed Forces. Product used **C++** with **multithreading**, **networking**, and **software design patterns**.
- Worked using the **agile** methodology.

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** 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 Rougelike**

- 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