

Skills

- **Language:** C, C++, C#, GLSL, CSS, HTML
- **Engines:** Unity Engine, Unreal Engine
- **Tools:** Git, OpenGL, Direct X, GLFW, Visual Studio, Visual Code, Resharper, Rider, Android Studio, gcc/g++, RenderDoc, Nintendo SDK with Unity Engine, Native Nintendo Code(NX)
- **Programming Paradigm:** OOP, TTD, Functional Programming, Design Pattern

Professional Experiences

Outgame Client Programmer

5minlab - Team of SMASH LEGENDS - Korea

Jan 2020 - Apr 2022

- Implemented network Outgame systems like HTTP, Websocket, MQTT and many other network codes and created Social, Party, Chat, Friendly match and many other network features.
- Partnered with UI/UX designer and made UI modules for helping UI/UX designers to use for making the best design for providing to users.
- Succeeded in attaching third-party SDKs for self-publishing and devised Login, Maintenance, IAP, Billing with Purchase, Push Alarm, News and many other platform-based systems.
- Regulated live service for a year Outgame client programmer alone and controlled server status, database, localization, build with deploying, coordinated market space like Playstore, AppStore, Steam and many other tasks.

Teaching Assistant

DigiPen Institute of Technology

Sept 2023 - Dec 2023

- Led 20+ students in Advanced Computer Graphics, covering modern GPU architecture and various rendering techniques including texturing, illumination, transparency, shading, mapping and shadows with OpenGL.
- Offered individual guidance to students struggling with understanding the course material and reviewed the technical aspects of projects.

Academic Projects

Game Programmer & Tech Director

Paparazzi - 3D Platformer Puzzle

Sept 2023 - Dec 2023

Team of 5

- Applied 3D Graphics object collision ideas for making object-cutting features with a plane and utilized it to cut objects by camera view frustum with Unity Engine.
- Developed a picture album system using data structure and algorithm knowledge and used it to generate new maps with saved album objects.
- Produced all of in-game UI system using Unity GUI system and mathematics knowledge.
- Navigated the git flow of the team overseeing all scripts and providing assistance as well as fixing bugs.

AI Game Programmer

Infe Station - First Person Shooting Horror

Jan 2023 - May 2023

Team of 6

- Developed different types of AI enemies using Behavior trees, Navigation system, AI perception and AI Debugging with Unreal Engine.
- Adapted Computer Science knowledge for making patrol type of enemy and utilized Computer Graphics view frustum experience for creating SCP-173/Weeping Angles type enemy.

Graphics Programmer & Engine Architecture

CamPic - 2D Platformer Puzzle

Sept 2018 - June 2019

Team of 4

- Headed design engine structure and implemented engine core systems and fulfilled Scene Manager, Object Manager and many other engine cores with GLFW, C++14.
- Programmed 2D Graphics system by using OpenGL with GLSL and applied camera, texture, animation, particle and other 2D graphics features to effectively show 2D Graphics.
- Formed game's core system with basic player movement, camera movement and other based game systems.

Education

BS in Computer Science in Real-Time Interactive Simulation

Expected Graduation: Apr 2024

DigiPen Institute of Technology

GPA: 3.92 / 4.00