HOSEOB JEONG

COMPUTER(GRAPHICS,GAME) PROGRAMMER 206-617-9728

DETAILS

206-571-4311
do8437@gmail.com

LINKS

Portfolio site

SKILLS

C++, OpenGL, GLSL, C, Lua, , Vulkan, JavaScript, Unreal Engine, Git, Subversion, Game Development, Computer Graphics, Visual Studio, VS code, Xcode, Maya, Substance Painter, PhotoShop, GarageBand

LANGUAGES

English

Korean

PROFILE

I am passionate about computer graphics, game-play programming and computer science.

I have done multiple team projects. I am good at communication with other people.

EDUCATION

Bachelor of Science in Computer Science in Real-Time Interactive Simulation, DigiPen Institute of Technology, Redmond, WA, USA

August 2021 — Present

DIT Merit Scholarship(Academic 2021~2023)

DIT KMU Transfer Scholarship(Academic 2021 Augest~2022 April)

Current Senior

Digipen-Dual-Degree-Program, Keimyung University, Daegu, Republic of Korea

March 2017 — February 2023

Academic Scholarship (2019 March~2021 July)

PROJECT

Vulkan Graphics Engine, 3 members

May 2022 — Present

- Vulkan Graphics Engine(Vulkan api, C++, lua, Entity Component System)
- Implemented abstraction objects and class(vulkanbuffer, pipeline, mesh, material, texture, shader.. etc)
- Implemented multiple lights(point light, directional light, spotlight)
- Implemented physics based rendering(PBR) with texture mapping(albedo, normal, metallic, roughness, emissive, ao map)
- Implemented shader including system(ex) “#include “shader.glsl” in glsl)
- Implemented easily handled the material textures
- Implemented IMGUI vulkan texture descriptor pool for drawing texture in imgui

OpenGL Graphics Engine(Personal Project)

September 2021 — April 2022

- Implemented OpenGL Graphics Engine (C++,GLSL,GLFW,C,Imgui)
- Implemented Type-safe OpenGL API classes (buffer,shader,and vertexarray,etc) with resource handling(Object Manager, Mesh Manager, Light Manager, and Texture Manager) using STL unordered map.
- Implemented “.obj” file loader.
- Implemented Multiple Lights, Reflection, Refraction with Dynamic Cube mapping, and Deferred Shading.
- GUI supported to handle the objects, meshes, lights and shader uniform variables.
- Collision detection with GJK algorithm
- Keyboard, mouse Input supported.

PinataPanic(GameProject),13 memebers

September 2021 — Present

-Gameplay programmer/Animation programmer.

-Unreal Engine 4

-Implemented Pinata character movement, interactive objects, and animation.

Q(GameProject), 5 members

September 2020 — June 2021

- Physic/Game-play Programmer, Sound Designer
- 2D platform Game Custom Engine (ECS) C++
- Implemented 2D physics, collision components(AABB, Sphere, Ray) and event.
- Implemented Debug Collision Visualization System, and Offset system (for easily handle texture position)
- Implemented Ray-casting algorithm for AI
- Implemented Spatial partitioning for collision with Quadtree data structure for collision optimization. Improve the O(n^2) to O(klogn)

- Implemented Player-movement state-machine.
- Made 3 background theme music with Garage band.
- Implemented game weapons with Lua script.

Slimy Doodly(Game Project), 3 members

March 2020 — June 2020

- Lead Designer, Gameplay/UI Programmer
- 2D platform Game Custom Engine(C++)
- Implemented tile-map loader.
- Implemented tile interaction logic with player
- Implemented UI/UX Design with window size compatibly.
- Made marketing product design(Poster, Trailer)

Sonar Soul(Prototype Game Project), 3 members

November 2019 — December 2019

- Game Designer, Mechanic Programmer
- Custom Engine(C++)
- Designed the game concept
- Implemented 2D collision.

Bald Carrot(Prototype Game Project), 3 members

October 2019 — November 2019

-Game-play/Game Mechanic programmer
-Custom Engine(C++) with Digipen supported framework.
-Implemented Ray-casting algorithm for game mechanic that used for lighting.

Wester(Personal GameProject)

May 2019 — June 2019

- JavaScript with p5js framework.
- Time-based Interaction Game