

Jaejun Jang

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 <https://github.com/jjj404001>

+Skills

PROGRAMMING LANGUAGE

C++ C C#

GLSL HLSL

PYTHON

FRAMEWORK

OpenGL Unity

Vulkan DirectX 12

TOOL

Git SVN

Visual Studio

RenderDoc

PIX Vim

Visual Studio Code

GDB

+Education

DigiPen Institute of Technology

Bachelor of Computer Science
in Real-Time Interactive
Simulation

+Employment

Digipen Institute of Technology

September 2020 to Current

Redmond, WA

Teaching Assistant

Teaching Assistant at "Advanced Computer Graphics I" class.

+Projects

Bibim renderer

September 2020 to Current

3D rendering engine with Vulkan and GLSL.

- Implemented GPU instanced render.
- Implemented deferred rendering pipeline.

Animation previewer

September 2020 to Current

3D animation rendering software with C++ and DirectX 12.

- Implemented skeletal animation playback using FBX file format.

Rendering engine

September 2019 to October 2020

Written in C++ with OpenGL and GLSL.

- Implemented Phong shading, cube map reflection, moment shadow map, PBR, IBL and SSAO.
- All implementation based on original research paper except for unreal engine 4 light model for PBR
- Up to 1024 local lights.
- Created real time ocean rendering scene.
- Wrote C# graphing application with C#, features B-spline, Bazier curves with De Casteljau and De Boor's algorithm.

Image Processing Project

January 2020 to May 2020

Image processing software with C++, OpenGL and GLSL.

- integrated custom console to load, save, and process image file.
- Built arithmetic operations such as addition, subtraction, multiplication, square and inverse.
- Built complex operations such as log transformation.
- Implemented image transformation, histogram equalization, histogram matching, Gaussian blur and discrete Fourier transform

Bark n' time

September 2019 to April 2020

Third-person puzzle game project, developed by Unity.

- Participated as generalist programmer.
- Created cinematic camera for dialogue scene.
- Implemented camera behavior using whisker raycasts.
- Developed item carry system for puzzle solving.

HON

September 2018 to May 2019

2D platformer action game

- Worked as graphics programmer.
- Displayed at G-star and Global Game Challenge2019.
- Implemented GPU particles.
- Built post processing.
- Developed debugger for collision bounding box, texture and particles.