YONGFENG QIU

PERSONAL DETAILS

 $\c Phone$ **⋒** Website

+1(801)-558-2896yongfengqiu.xyz

 $\square E$ -mail $\mathbf{Q}Address$

yongfeng.qiu@outlook.com 2252S 400E, Apt259, SLC, UT

EDUCATION

M.S. Graphics & Visualization Track

Secured 3.76 GPA.

University of Utah

B.S. Graphics & Image processing Track

Harbin University of Science and Technology

Secured 85.5 percentage.

SKILLS

Programming: C/C++, PYTHON, MATLAB, MYSQL, LUA, HTML, JAVASCRIPT

Computer Graphics: Rasterization [U+FF0C] Ray tracing, Real-time Rendering, Physically-based Rendering, Digital image processing

Operating System: Master a variety of server models, synchronization, and communication between threads/processes, and the dynamic library, static library, and lock mechanism.

EXPERIENCES

VirtAI Tech Feb. - May. (2021)

Cloud rendering department, System Development Engineer

Rendering optimization for Linux Operating system. Convert DX11-based renderer to Vulkan-based.

University of Utah

Jan. - May. (2022)

Computer Network Teaching Assistant

Assists the professor with creating and delivering learning materials in a course.

PROJECTS

Path Tracing with OpenGL [Project]

- ⊙ Use the BVH data structure to manage the scene, and pass it to the GPU in the form of texture through OpenGL API
- ⊙ Tiled-based Rendering

Light System with OpenGL [Project]

Jun. 2022

- theory light
- ⊙ Image based light
- Area light
- ⊙ Volumetric light

PBR with OpenGL [Project]

Mar. 2022

- ⊙ Image based light and Picture Textures, Procedural Texture (Noise)
- Physics Based Camera: Shutter speed, aperture, sensitivity and Disney principle PBR (10 parameters)

Graphic system based on harmony search algorithm and CNN

Sep. 2019

- Basic 2D 3D graphics drawing and modification operations
- Using HS algorithm to impose geometric constraints on graphics
- using CNN to retrieval (primary rough retrieval, secondary accurate retrieval)

Cloud system based on TCP / IP protocol

Feb. 2019

- Registration, login, friends list, friends status, add and delete friends, user profile change, single chat
- © Cloud disk, including file second transmission, breakpoint continuation, download, sharing, extraction, deletion, log.