

WORK EXPERIENCE

Technical Artist, FACEBOOK REALITY LAB, Redmond, WA

8/2018 – present

Technical Artist working on AR/VR

- Developed pipeline tools (scene manager, texture auto applying) and AR/VR demo in Unity.
- Generated synthetic data and created tools using Houdini VEX.
- Created characters from scan data with Wrap and Houdini grooming system.

Technical Artist, WARNER BROS. GAMES/AVALANCHE, SLC, UT

3/2018 – 8/2018

Material Technical Artist Intern

- Optimized and create shaders/materials for artist in Unreal Engine 4 set up.
- Assisted VFX team to optimize and implement art assets from Houdini to UE4.
- Ensured VFX assets are built efficiently and perform within budgets.
- Provided art pipeline documentation and samples for outsourcing companies.
- Worked with designers and engineers to solve rendering and graphics-related challenges.

Technical Artist, TENCENT GAMES, Shenzhen, China

5/2017 – 7/2017

Generalist Technical Artist Intern Supporting Four Mobile Games in Unity 3D®

- Created shaders/materials for artist in Unity 3D.
- Created Unity tools for effects texture tiling and unused assets sorting.
- Created a Unity tool to show objects' moving track and to collect position data on profiler.
- Assisted engineer team trouble shooting problems with art assets and animation clips.

PROJECT

OpenGL Shader Development

9/2017 – 4/2018

Personal Project

- Developed C++ OpenGL graphics shaders with keyboard and mouse controls for camera, light and scene. Functions include texture, cubemap reflection, render to texture, shadow, Toon Shader, Sobel Operator edge detection, and Chinese Painting stylistic shader.
- This is a personal project and can be found at <http://ming-zi.me/Graphics/>.

Student Researcher, CYBEROPITCS CORPORATION, Minneapolis, MN

1/2016 – 6/2016

Use MATLAB to optimize 3D scanning pictures of circuit boards (Photogrammetry)

- Analyzed image information from height map and find places with big change in height.
- Provided two solutions to reduce imperfections caused by MATLAB built-in functions.
- Project link: <http://ming-zi.me/Graphics/>

EDUCATION

UNIVERSITY OF UTAH, Salt Lake City, UT

8/2016 – 5/2018

Master of Entertainment Arts & Engineering (MEAE)

Teaching Assistant for EAE3710 – Traditional Game Development for two semesters.

CARLETON COLLEGE, Northfield, MN

8/2012 – 6/2016

BA Degree in Mathematics

Programming Skills

C#/C++

Java

OpenGL

GLSL

Unity Shaderlab

Python/PyMel

MATLAB

DCC Tool

Maya

Unity 3D

Unreal Engine4

Lumberyard

Substance Designer

Houdini

Core Skills

Scripting

Modeling

Shader-Programming

