

YingXuan(Jennifer) Liao

General Engineer

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SKILLS

Programming: C++, OpenGL(GLSL), Lua, C#, Java web development, Xml/Html/CSS/JavaScript

Game Engine: Unity/Unreal

Arts & Design: Adobe Illustrator; Sketch/Figma; MagicalVoxel

EDUCATION

Carnegie Mellon University (CMU)- Master of Entertainment Technology **2021.08 – Expected 2023.05**

Entertainment Technology Center, Major in Entertainment Technology(Computer Graphics)

Wuhan University (WHU) - Bachelor of Engineering

2015.09 - 2019.06

School of Computer Science, Major in Software Engineering

EXPERIENCE

Lilith Games Company | Game developer | Lua, In-house game engine, Metaverse **2020.03 - 2021.05**

- Worked on io games, RPG, and chatroom in a Metaverse game platform project.
- Implemented game logics like cameras, FSM, NPC behaviors, Object Pool in the In-house game engine.
- Converted the design into reality using scripting languages (Lua).

Neusoft Ruidao Company | Software Engineer (Intern) | Java web dev, MySQL **2018.07 - 2018.08**

- Joined an incubator project about a travel blog website developed with Java, including front-end and back-end development. e.g. MySQL, Java Servlet, Spring MVC, and other common technologies.

PROJECTS

Telepathway, Google | General Engineer(Graphics) | CG, C#, Unity, XR **2022.02 - 2022.05**

- An Academic Team Project with Google, exploring the visualization of Machine Learning.
- Write procedural generating map in Unity using Delaunay triangles and mesh editing.
- Involved in visualizing K-means clustering and Reinforcement machine learning.

Rasterizer & Mesh edit & Ray tracer | Graphics Engineer | C++ **2022.02 - 2022.05**

- See in <https://www.yingxuanliao.com/computergraphics>
- Writing a 3D CG software toolset, based on the course CMU 15-662 Computer Graphics.
- Using C++ and OpenGL to implement many functions in rasterizer, geometry, ray tracing.

Build Virtual World, CMU | General Engineer | Shader graph, C#, Unity, VR/AR **2021.09 - 2021.12**

- Built each game with the other programmer, 2 artists, and a sound designer in every 2 weeks. Including Unity, XR technology(AR,VR) and so on.
- Created particle systems like fire, fog effects and shader graph to make water, thunder.
- Implemented game logics like Singleton Pattern, NPC behaviors, Game manger Template.

RESEARCH

Bachelor Degree's Thesis

Chatbot Under VR - how to enhance the conversation experience

2018.12 – 2019.05

- Developed and trained a spoken dialogue system using seq2seq in python.
- Analyzed the emotion scores of players and AI's words with the help of IBM Watson SDK, and explored how emotion analysis would change games in a testing VR game environment in Unity.