REMUS WONG

SOFTWARE ENGINEER

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https://remusw.github.io

EDUCATION

The University of Texas at Austin

Bachelor of Science in Computer Science Concentration in Video Game Development Spring 2022

SKILLS

Languages: Typescript/Javascript, C++, GLSL, Python, C#, Java, Rust **Libraries & Frameworks:** ThreeJS, WebGL, OpenGL, Qt, React, Flask

Tools: Unity, Unreal Engine, Git, Houdini, Docker

Database: PostgreSQL, AWS (RDS, S3)

RELEVANT EXPERIENCE

CLO Virtual Fashion — Web Graphics Engineer

January 2023—Present

Optimize order-independent transparency algorithm (depth peeling) to increase FPS by 15%

3.64/4.0

- Implement supersampling anti-aliasing to improve visual quality of images
- Enhance benchmark test to profile and log GPU usage statistics to better track and identify performance changes
- Analyze download speed of 3D data and optimized download strategy to improve downloads by 22%
- Research and develop a WebGPU prototype for viewing and editing 2D clothing patterns
- Collaborate with an international team to directly resolve issues with users and plan user oriented goals

Aspyr Media — Associate Technical Artist

July 2022—January 2023

- Initiated implementation of a NoSQL database to store assets for a content management system
- Refactored tools launcher for modular deployment across users

Corvid Technologies — *Virtual Reality Intern*

May 2021—August 2021

- Streamlined preprocessing of high-fidelity CAD models for simulation into an Unreal Engine VR application
- Enhanced pipeline tools using PyQt and Unreal Python API to automate import/export of custom levels for Unreal
- Created an AR experience with the Hololens 2 to interact with a physically accurate vehicular airflow simulation

PERSONAL PROJECTS

Ready Recipes — Full Stack Developer

- Designed front-end with React to serve users information about regional food recipes
- Modeled PostgreSQL database using AWS RDB to store relationships between recipes, ingredients, and location
- Created RESTful API using Flask and Postman to facilitate backend services

2D Unity Game Capstone — *Programmer / Game Designer*

- Programmed multiple game systems like branching dialog and enemy AI as a principal programmer for the team
- Applied agile methodology over the course of the semester in a team of six to coordinate consistent progress
- Led development of key game design decisions through technical documentation and communication

${\bf OpenGL\ Raytracer}-{\it Programmer}$

- Implemented Whitted illumination model to ray trace 3D scenes
- Support triangular meshes with triangle-ray intersection and phong interpolation for per-vertex normals
- Added bilinear texture mapping for models and custom cube maps for scene customization