REMUS WONG

SOFTWARE ENGINEER

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EDUCATION

The University of Texas at Austin Bachelor of Science in Computer Science Spring 2022
3.64/4.0

SKILLS

Programming Languages: C++, Python, C#, Java, Javascript, Rust
Libraries & Frameworks: Qt, React, Flask
Tools: Unity, Unreal Engine, Git, Docker, OpenGL
Database: PostgreSQL, AWS (RDS, S3)

RELEVANT EXPERIENCE

Aspyr Media — *Associate Technical Artist* July 2022—Present

- 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
- Created an AR experience with the Hololens 2 to interact with a physically accurate vehicular airflow simulation
- Enhanced pipeline tools using PyQt to automate import and export of custom levels for Unreal

PERSONAL PROJECTS

Ready Recipes — *Full Stack Developer*

- Designed frontend 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 Game Capstone — *Programmer / Game Designer*

- 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
- Programmed multiple game systems like branching dialog and enemy AI as a principal programmer for the team

OpenGL Raytracer — *Programmer*

- Implemented the 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

OpengGL Menger Sponge Fractal — *Programmer*

- Constructed OpenGL pipeline to create and load vertices to display a menger sponge fractal
- Enabled custom viewing by adding functionality for an orbital camera and first-person shooter camera
- Wrote custom GLSL to shade the menger sponge and environment with unique properties

L-Systems in Taichi — *Programmer*

- Simulated rigid body dynamics with Taichi's MLS-MPM (moving least squares material point method) physics solver
- Created a 2D/3D L-System with customized physical materials for simulation