Hannah Rogers

hrogers118@gmail.com | (609) 915-1170 | rogershannah.github.io | Madison, WI

WORK EXPERIENCE

Raven Software, Activision, Middleton, WI, *Associate Rendering Engineering* July 2023 - January 2024

- Took the lead on a new shader feature and worked closely with artists to introduce and assist with its application
- Refactored closely coupled code in order to make prior functions reusable and to avoid redundancy
- Collaborated with graphics teams across studios on overlapping features
- Participated in weekly manual play testing, provided feedback, and reported bugs for Modern Warfare III

Raven Software, Activision, Middleton, WI, *Rendering Software Engineering Intern* May 2022 - August 2022

- Communicated within my team and across departments to identify requirements for a new feature
- Created a new material feature using HLSL and C++ and implemented the plumbing to pass information from the frontend to the shader
- Manually tested and debugged code using the in-house asset production engine
- Used and furthered 3D math and optimization skills in a real-time rendering engine
- Participated in weekly manual play testing, provided feedback, and reported bugs for Modern Warfare II

Intel, San Francisco, CA, *Graphics Software Engineering Co-op* January 2021 - July 2021

- Contributed to the development of the broadcast and coaching products on the Olympics Technology Group
- Gathered historical data and wrote scripts using Python, C++, and Unity to test graphics capability of data visualization application and the broadcast pipeline's data generation, and collaborated on their improvements
- Collaborated with teammates to implement an algorithm for smoothing skeletal data gathered from motion capture to generate an accurate 3D model and animation

PROJECTS

Interactive Bee Scene*, CS5310: Computer Graphics* December 2021

- Utilized C++, OpenGL, SDL, and GLSL to create and render a scene of bees in a honeycomb space
- Implemented mouse and key event user navigation
- Developed an OBJ Wavefront parser, implemented shading, normals, framebuffers, and blending

Mellifera, *CS3540: Game Programming* June 2020 - July 2020

- Worked in a team to design and develop a 3D Unity game using the Unity UI Engine and scripting in C#
- Created assets, animated models, and implemented a finite state machine for non-player character behavior
- Collaborated on level design, game states, and player implementation to create levels with increasing difficulty

EDUCATION

NORTHEASTERN UNIVERSITY, Boston, MA

Khoury College of Computer Sciences 2017 - 2023

Bachelor of Science degree in Computer Science and Media Arts (Summa Cum Laude) *May 2022*

Master of Science degree in Computer Science (Magna Cum Laude) *May 2023*

COMPUTER KNOWLEDGE

Languages: C++, C#, GLSL, HLSL, OpenGl, WebGL, Java, Python, JavaScript, TypeScript, jQuery, React, Vue, Html/CSS, SQL, PHP, jUnit, Jasmine, Chai

Systems: Windows, MacOS, Android, Linux

Software: Unity, Unreal Engine, Perforce, GIT, IntelliJ, Eclipse, Visual Studio Code, Android Studio, PostgreSQL, SVN, Maya, Blender, Houdini, Solr, Adobe Creative Suite