

Education

Carnegie Mellon University, Pittsburgh, PA

August 2018 - May 2022

Working towards a B.S. in Computer Science, with a minor in Game Design

QPA: 3.60/4.00

Previous Work Experience

Hi Rez Studios - Atlanta, GA

June 2021 - August 2021

- Worked as a Tools intern, with a focus on tools for Rogue Company
- Developed standalone tools as well as integrations for Unreal Engine and Maya
- Challenges included building custom editors, automatic validation of Maya animation files, and performance capturing in Unreal Engine

Entertainment Technology Center - Pittsburgh, PA

May 2020 - August 2020

- Worked on a team for a federal government sponsored, nationwide cybersecurity education project
- Built a fully featured, networked game experience for up to 5 players
- Challenges included integrating with autonomous systems to provide logins, hosting, and backend game servers, syncing between 3rd-party servers, game hosts, and player machines, and building features into a custom render pipeline.

Yeti Coolers - Austin, TX

June 2019 - August 2019

- Worked as a Devops and Automation Intern
- Built middleware and other custom software to automate business-critical tasks such as onboarding and offboarding, factory control and self-healing, and software deployment.

Relevant Projects

CMU Game Creation Society (www.gamecreation.org) - Current Vice President

August 2018 - Present

- Spring 2021 - Team lead for Escape from Lab 8, a fully featured roguelike game. Worked on an extensive framework and tooling system for creating roguelike games, procedural generation, and an intelligent and extensible status effect system.
- Fall 2020 - Team lead for a custom version of the Unreal Fast Track, teaching other students how to use the Unreal Engine and followed by leading small teams to make games
- Spring 2020 - Worked on Slope Crusher, an audio-visual game in Unreal Engine.
- Fall 2018-Fall 2016 - Made and led various projects, creating platformers and tower defense games.

Computer Graphics - CMU 15462

- Built out a piece of custom 3D software, Scotty3D. The software can edit collada files, rasterize and raytrace physically accurately, and perform complex animations with splines and armatures. All of these features were built from scratch around a light framework in C++.

Computer Game Programming - CMU 15466

- Currently taking - Built games from scratch with C++, OpenGL, and LibSDL. Projects included creating custom renderers, collision detection, audio implementations, networking, and various other standard engine features, while building out 6 small games and 1 large project.

Skills

Programming languages: C, C#, C++, Java, SML, BASIC, Python, Powershell, GLSL, RobotC

Applications: Unity, Unreal Engine, QT, Blender, ServiceNow, SCCM, Active Directory, Unix, Azure, NewRelic, Microsoft Office

Interests/Hobbies

Current Vice President of Game Creation Society, Inland Surfing, Wakeboarding, Skiing, Snowboarding, Kitesurfing, Scuba Diving, Sailing, Home Brewing

Online portfolio and more information available at woodymccoy.dev