Ethan Moyer

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Education

The Pennsylvania State University

Bachelor of Science in Computer Science, Minor in Japanese Language

- Cumulative GPA: 3.98/4.00
- Dean's List: Fall 2020, Spring 2021, Fall 2021, Spring 2022, Fall 2022, Spring 2023

EXPERIENCE

Software Engineering Internship

Remcom Inc

- Wrote code in C++ on a team of 12 developers for XFdtd, a 3D EM simulator
- Created bug fixes for issues related to updating XFdtd to use Qt 5 or issues raised by clients
- Developed a solution to allow XFdtd's interface to scale properly on high resolution displays
- Developed a system and a user interface to save/load simulation parameters using XFdtd's existing library tools

Learning Assistant

The Pennsylvania State University

- Worked with two professors as a learning assistant for an introductory computer science course of around 100 students (CMPSC 101)
- Graded student's Python programming projects and assignments
- Assisted students via email and virtual meetings on Zoom

Projects

Small Fighter | Unity, C#, Git

- Developed a two player fighting game using the Unity game engine and C#
- Implemented an input buffer to execute different actions depending on the player's sequence of inputs
- Created a system to read actions from serialized objects while executing character movements, animations, and performing collision detections on each frame

JBOD Controller $\mid C, Git$

- Wrote code in C to control a JBOD (Just a Bunch of Disks) array across a network
- Implemented functions to read and write arbitrary amounts of bytes to and from disks
- Implemented a cache to improve read/write performance

FPS Demo | Unity, C #, Git

- Developed a four player local-multiplayer first person shooter
- Utilized the Unity game engine and wrote scripts in C#
- Implemented the state machine pattern for player-character actions and a system to correctly play audio for multiple players simultaneously

TECHNICAL SKILLS

Languages: C#, Python, Java, C/C++, JavaScript, HTML/CSS Frameworks/Engines: Unity, Godot, Node.js Developer Tools: Git, Apache Subversion, Visual Studio, VS Code, NetBeans Libraries: Qt University Park, PA Aug. 2020 - May 2024

May 2023 – Aug. 2023

May 2022 – Aug. 2022

University Park, PA

State College, PA

Apr. 2022 – Aug. 2022

Feb. 2022 – Apr. 2022

Apr. 2021 – Sep. 2021