Josie Thompson

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B.S. in Computer Science
University of Washington (2022)
Seattle, Washington

Skilled in technologies
C/C++, Unreal and Blueprint, Python, Java/C#, javascript

Work Experience

Rapid Prototype Developer Freelance — July 8 - July 25 2024

- Used a framework from the UE marketplace to build a deckbuilder prototype with unique gameplay mechanics
- Researched and assessed how to use existing architecture with limited documentation, making use of its official support discord, as well as using engine tools like the reference viewer and blueprint debugger
- Rapidly built UI based on mockup art and design specifications, using cutting edge engine features like the MVVM plugin

Unreal Gameplay Engineer Timberline Studio Inc. — April 2022 - November 2023

- Contributed to design and implementation of tech systems using Object Oriented solutions
- Worked with designers to communicate needs for features by closely reading specifications and asking clarifying questions
- Exercised skills in clear communication of goals, problems and research into potential solutions
- Used design specifications to write interfaces from C++17 code into UE5 blueprint scripts
- Rapidly prototyped and iterated on important UI features such as menus, notifications and item info, using the Common Game plugin from Unreal's Lyra project
- Published in-depth documentation and tutorials on how to use custom tools
- Regularly contributed to the software lifecycle by reviewing code, sending pull requests, and providing hot fixes for bugs

Lead Infrastructure TA Paul Allen School of Computer Science
Software Design and Implementation — March 2021 - December 2021

- Utilized and modified command applications written with Python to publish course assignments within a tight schedule
- Resolved dozens of special case problems per week with students' Java, Typescript and React assignments
- Managed organization for grading assignments for a class of nearly three hundred students
- Graded 15-30 students each week as part of my normal TA duties
- Held Office Hours and helped teach supplemental sections for students to broaden their understanding

Personal Projects

SofaCollider HRTF Library https://github.com/josiest/SofaCollider
A library for reading HRTF files into SuperCollider

- Rapidly prototyped a basic library for processing multi-directional HRTF audio data with SuperCollider
- Formed creative solutions to interfacing between languages in order to use existing tools to accelerate project development
- Wrote tools to read a write data to and from a standard HRTF format into the SuperCollider runtime environment

tess https://github.com/josiest/tess
A library for working with hexagonal grids in C++

- Implemented algorithms for working with unique mathematical norms in C++17
- Wrote projections to and from pixel space and hex space using concepts of linear algebra and spatial geometry
- Crafted carefully thought-out interfaces to make the library simple and intuitive to use
- Used library tools to create a procedural hexagonal map generation tool