

Jacob Karr

Software & Game Developer

Experience

Founding Developer

2021-2022 / 1 Year

Stout Mobile Augmented Reality Tour of Art (SMART-Art)

Menomonie, WI

- Spearheaded the development and release of an augmented reality framework using the Unity 3D engine, leading a team of developers through the entire software development lifecycle.
- Streamlined the development pipeline by creating in-engine tools, resulting in increased efficiency and a more user-friendly workflow.
- Oversaw user testing and resolved issues, resulting in a successful project launch.
- Authored comprehensive technical documentation and user guides, ensuring continuity of the project.
- Integrated the augmented reality framework into a digital humanities course as a teacher's assistant, developing engaging lessons and activities that leveraged the technology.

Game Programmer & Technical Artist

2020-2021 / 8 Months

3D Game Design & Development Capstone

Menomonie, WI

- Worked closely with a diverse team of programmers, artists, musicians, and faculty members, fostering collaboration and communication across disciplines.
- Designed and implemented custom shaders using GLSL and Unity's shader graph, creating visual effects and enhancing the overall quality of the project.
- Supported lighting development and collaborated with artists to ensure a cohesive visual style, providing technical expertise and assistance as needed.
- Responsible for code review and refactoring, resulting in improved performance and proper documentation and code style.

Skills

Software Development: [C#](#) [C++](#) [C](#) [Java](#) [Python](#) [GLSL](#) [openFrameworks](#)

Game Engines: [Unity](#) [Unreal](#) [Godot](#)

Front-end & Web Games: [HTML](#) [CSS](#) [JavaScript](#) [Phaser v3](#) [Three.js](#)

Source Control: [Git](#)

Management & Methodology: [Agile](#) [Scrum](#) [FigJam](#)

Writing & Design: [Technical Writing](#) [Markdown](#) [Figma](#)

Awards

"Best Mobile Game" awarded to *LOOT!*

Stout Game Expo 2018

Education

University of Wisconsin-Stout

2018-2022

Bachelor of Science in Computer Science (Game Design & Development Concentration), Minor in Mathematics

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