

Jacob Karr

Software & Game Developer

Experience

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

Menomonie, WI

Founding Developer

2021-2022 | 1 Year

- * Spearheaded the development and release of an augmented reality framework using the Unity 3D engine, leading a team through the entire software development lifecycle.
- * Collaborated with the product owner to determine the most effective approach for meeting project requirements, holding frequent meetings to clarify design and receive feedback.
- * Streamlined the development pipeline by creating in-engine tools, resulting in increased efficiency and a more user-friendly workflow.
- * Oversaw user testing to ensure compliance with AR and UI/UX design principles, resolving issues and implementing changes as necessary.
- * Authored comprehensive technical documentation and user guides to facilitate future development and ensure the 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.

3D Game Design & Development Capstone

Menomonie, WI

Game Programmer & Technical Artist

2020-2021 | 9 Months

- * 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: spot and refactor code smell, improve performance, and verify 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](#)

Source Control: [Git](#)

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

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

Awards

"Best Mobile Game"

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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