

# Aidan Walz

Gameplay & Systems Programmer

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## PROFESSIONAL EXPERIENCE

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**Rivals of Aether II** | Game Programmer (Unreal Engine 5, C++) Jun 2024 - Feb 2026

- Designed and shipped five game modes as a solo gameplay programmer, including Training Mode, Arcade Mode, Target Test, Eye Break Mode, and Edgeguard Training, working alongside design and art teams.
- Engineered the game's camera overhaul, replacing the 2D camera with a 3D system that interpolates camera subjects in three dimensions using view-projection logic and dynamic bounds.
- Built a three-tier tutorial track (Beginner, Intermediate, Advanced) on a reusable level-scripting system that let designers author lessons without engine code.
- Developed custom in-editor level design tools using splines and procedural mesh generation, reducing level iteration time.
- Independently designed 12 of the 15 Arcade Mode levels, balancing difficulty progression for new and veteran players.
- Iterated on core gameplay systems based on player feedback gathered through Nolt, improving stability and competitive viability through the beta and live phases.
- Partnered with artists to design and implement custom level elements.

## PROJECTS

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**project-slippi** | C, C++, Rust, PowerPC Assembly Open Source

*Replay and metadata infrastructure for Super Smash Bros. Melee.*

- Merged 8+ pull requests into core repositories (dolphin, slippi-ssbm-c, slippi-rust-extensions, slippi-ssbm-asm).
- Worked with project maintainers to build a worker process that handles ranked data asynchronously.
- Designed and developed a C front-end that receives ranked data and animates a live in-game rank display on rating change.
- Learned PowerPC assembly by reading disassembly from the game against a reference manual.

**MeleeCameraUE5** | Unreal Engine 5, C++

*An implementation of Super Smash Bros. Melee's camera system in Unreal Engine 5.*

- Recreated the original camera behavior through reverse engineering of the game's source.
- Built a working understanding of camera view projection and 3D interpolation that later informed the Rivals of Aether II camera rework.

**The Watch** | Unity, C#

[Scream Jam 2025](#)

*A first-person, PSX-style survival horror game where you collect ritual components to banish a witch from your grandmother's backyard while an entity hunts you. Built by a team of four.*

- Reached 417 downloads and 112 collections across 3,900+ page views on [itch.io](https://itch.io).

## SKILLS

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**Languages:** C++, C, C#, Python, JavaScript (Node.js, React), Assembly (PowerPC)

**Engines & Tools:** Unreal Engine 5, Unity, Blender, CMake, Git, Plastic SCM

## EDUCATION

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**Indiana University**

Coursework in Computer Science and Mathematics.