

QUINN AHO

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EDUCATION

Wayne State University

B.S. in Computer Science Engineering

- GPA: Major 3.86, Cumulative 3.2
- Coursework: Computer Graphics, Game Programming, Software Engineering, Linear Algebra

Honors: Congressional App Challenge Winner • XR Midwest / HackDearborn Finalist • Edward + Bernard Gaffney Scholar

Detroit, MI

Aug 2022 – May 2026

WORK EXPERIENCE

Johns Hopkins Applied Physics Lab

Software Engineering Intern - Immersive Technologies and Software Solutions:

- Developed **Unity training simulations** and built **Unreal Engine prototypes**.
- Built a **node-based authoring tool (IMI System)** to let non-programmers create lesson/mission logic.
- Contributed to **software engineering tasking** such as (CI/CD, PowerShell, NSIS, virtualization, networking) to streamline builds.
- Contributed to **technical art**: shaders, batching, and lighting optimization.

Laurel, MD

May 2024 – Present

Corvid Technologies

VR Visualization Intern:

- Built VR development tools and **IK-based avatar systems** in Unreal (C++/Blueprints).
- Produced a **cinematic demo** for Raytheon, integrating CAD/Blender assets with custom shaders and VFX
- Improved debugging and profiling workflows for real-time VR applications.

Mooresville, NC

May 2023– Aug 2023

GS Engineering - Multiple Roles

Simulation Engineering Intern:

- Designed an **Unreal Engine plugin** for KPI tracking in digital twin vehicle simulations.
- Focused on collisions, physics tuning, and gameplay logic for realistic environments.

Houghton, MI

Nov 2023– May 2024

Technology Growth Intern (Highschool):

- Researched and prototyped VR training applications in Unreal Engine.
- Established **CAD-to-engine pipelines** for simulation and training use.

May 2021– Aug 2022

PROJECTS

Realistic AI Avatar Animation System

Freelance Contract (Junior Developer)

- Integrated **Nvidia Audio2Face + Eleven Labs** into Unreal for real-time AI-driven avatars.
- Built optimized **animation state machines** and procedural systems for seamless AI interaction.

Sep 2024– Nov 2024

Glint 3D – C++ Automated 3D Rendering Engine

Independent Project – Computer Graphics

- Built a **modular, cross-platform renderer** (OpenGL/WebGL2 → Vulkan/WebGPU) with PBR, BVH raytracing, and unified render graph.
- Designed an **AI-first architecture** with task modules, prompting workflow, and headless automation for rendering & data generation.
- Developed a **simple desktop GUI with terminal-style look** for easy adoption, plus a **modern Tailwind web UI** for project snapshots.

Feb 2024 – Present

Milestone – Local-First Event-Driven Task Manager

Independent Project – AI Developer Tooling & Automation

- Built a desktop app (Electron + React) that turns any repo into an **event-driven, machine-readable task system**.
- Implemented append-only logs, state snapshots, and AI provider integration for **auditable, automated development**.
- Designed a clean dark UI with agile board and milestone archiving for **focused, local-first project management**.

Dec 2024 – Jan 2025

UE5 Cinematic – “The Golem’s Curse”

Personal Project

- Directed **lighting, VFX, cinematography, and animation** in Unreal Engine 5.
- Produced a full-length cinematic with professional-quality visuals and sound design.

SKILLS

Programming: C++, C#, Python

Engines & Frameworks: Unity, Unreal Engine 4/5 (C++/Blueprints)

Graphics: OpenGL, DirectX, Shader Development (GLSL/HLSL), Rendering Pipelines

Pipelines & Tools: CI/CD, Git, Perforce, PowerShell, NSIS, Testing/Debugging

VR/AR Development – Interaction systems, motion tracking, procedural animation, multiplayer

Specialties: Gameplay Systems, VR/AR Development, Simulation, Tools & Plugins, Technical Art

DCC Tools – Blender, Ableton, SolidWorks, NX