# **QUINN AHO**

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Detroit, MI 48202 5440 Cass Ave.

#### EDUCATION -

#### Wayne State University

Detroit, MI

Bachelors of Engineering in Computer Science

Aug 2022 - May 2026

- Major GPA: 3.86 Cumulative GPA: 3.2;
- Relevant Coursework: Software Engineering, Computer Graphics I, Game Programming I, Computer Science I&II

#### **Awards and Honors**

- Congressional App Challenge Winner
- Dean's List Recipient
- Edward + Bernard Gaffney Scholarship recipient
- Upper Peninsula Diving Record Breaker

#### WORK EXPERIENCE \_\_\_\_\_

#### Johns Hopkins Applied Physics Lab

Laurel, MD

Software Engineering Intern - Immersive Technologies and Software Solutions:

May 2024 - Present

- Unity/C# development: Contributed to development of vehicle training simulation software for US Soldiers.
- Developed software prototypes using Unreal Engine which obtained funding through the next 5 years.
- SWE tasking such as: Powshell scripting, NSIS installer dev, virtualization, networking config, CI/CD pipeline development.
- Tech Artist tasking such as: modeling, shader development, lighting setup, batching optimizations.

Corvid Technologies Mooresville, NC
VR Visualization Intern: May 2023 – Aug 2023

• Unreal Engine Blueprint & C++ VR software and tool development: Debugging/QA + finishing tasking.

- Developed a standalone feature for Corvid's VR Software VISON VR IK ATD positioning tool.
- Create a full length promotional cinematic delivered for Raytheon Technologies.

**GS Engineering - Multiple Roles** 

Houghton, MI

Simulation Engineering Intern:

Nov 2023- May 2024

- Led development of a KPI plugin for extracting and analyzing vehicle data in Unreal Engine (digital twin).
- Optimized vehicle mockups in Blender + UE, focusing on rigging, suspension, and collision.

Technology Growth Intern (Highschool):

May 2021- Aug 2022

- Researched and developed VR simulation environments for military applications using Unreal Engine.
- Developed CAD-to-game engine workflows to be adopted for more engineering use cases.

#### PROJECTS \_

#### Realistic AI Avatar Animation System

Freelance Contract (Junior Developer)

Sep 2024- Nov 2024

- Led the development of a lifelike animation system for an Al-driven avatar using: Unreal Engine, Nvidia Audio2Face, and Eleven Labs.
- · Designed and optimized animation state machines, blending techniques, and procedural animations
- Integrated motion capture data and synchronized animations with real-time AI interactions for seamless behavior.

## C++ OpenGL Renderer + CPU Raytracer

University Project - Computer Graphics

Feb 2024 – April 2024

- Real-time OBJ viewer with wireframe/flat/Phong/point-cloud modes, textures, interactive camera, and GUI.
- Offline CPU ray tracer with BVH acceleration, textured surfaces, and point lights, rendering to a screen-quad.
- Built core systems from scratch: OBJ loader, shader/texture managers, BVH & triangle primitives + more.

### **VR Diving Simulation**

XR Midwest Hackathon - Contestant

Oct 2024

- Built a VR Air Awareness trainer for divers/gymnasts with real-time comeout control, hand tracking, and instant feedback.
- Implemented the real-time animation reaction system and integrated tracked hands with timing cues.

## SKILLS

Real-Time Engines & XR: UE4/5 (C++/Blueprints) • Unity (C#) • Graphics/Shader Dev (OpenGL) • Model Optimization • XR (HTC & Oculus SDK).

DevOps & Process: Git (GitLab + Bitbucket) • Perforce • Jira • Confluence • Agile Methodologies • Virtualization • Leadership.

Software, Web & AI: Python • Java • Node.js • MongoDB • HTML/CSS/JS • Three.js • Hugging Face • GPT API • UI/UX Design • PowerShell.

CAD/DCC & Media: NX • SolidWorks • Blender • Ableton (Sound Design + Production) • DaVinci Resolve.

Interests: Diving/Gymnastics • Music (Performance + Production) • Snowboarding • Digital Art