

Summary

Senior software engineer specializing in XR development with over 9 years of experience creating VR and AR applications. I am skilled in both OOP and ECS design patterns and have extensive experience with rapid prototyping.

Experience

Store No. 8 - Walmart Senior Software Engineer July 2021 - Present	Enterprise AR application for the Apple Vision Pro <ul style="list-style-type: none">Led development of a feature to generate Planogram PDFs that align with industry standard formats using Swift, Firestore, and Firebase Cloud FunctionsImplemented a novel multi-threaded approach to modify component data using RealityKitCollaborated with senior designers to implement fundamental navigation UI using SwiftUIPrototype was demoed to senior leadership at Walmart and Apple including Apple CEO Tim Cook In-aisle filtering application for retail shoppers <ul style="list-style-type: none">Created a system to save, load, and adjust product locations across aisles inside all WalmartsLead engineer for demos to Walmart Inc. CEO, Walmart US. CEO, and senior Walmart leadershipProject was showcased at Walmart's CES 2024 exhibit Common product platform for in-store AR applications <ul style="list-style-type: none">Created Asset Loading and Point of Interest services using Unity's Addressables Asset System which allowed for the asynchronous loading/unloading of any asset type at runtimeIntegrated large scale Digital Twins for Walmart SupercentersExperimented with various authentication systems for Unity on the Magic Leap 2 Consumer in-store retail shopping application <ul style="list-style-type: none">Led development on major features: shopping list, shopping cart, and 3D character state machinesOptimized on-shelf filtering across thousands of products for attributes such as price, rating, nutritional content, etc.Project was demoed to Walmart Inc. CEO, Walmart US CEO, and senior Walmart leadership
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Amazon Software Engineer July 2020 - June 2021	<ul style="list-style-type: none">Programmed scripts to automate workflows that helped external customers resolve issues with the Title Team's servicesResolved weekly tickets to fix bugs and implement new features
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NASA: GSFC AR/VR Intern June 2019 - August 2019	<ul style="list-style-type: none">Developed a program that converts reflectance data from the Lunar Reconnaissance Orbiter into Unity Terrain MeshesDesigned modular software that allows users to construct 3D models while in VRPresented organization projects to multiple teams across several NASA campusesMentored high-school interns by teaching them Unity & Unreal Engine 4
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Education

Oakland University 2017 - 2019, Oakland, MI	BS Computer Science with a minor in Japanese University Hackathon Organizer - GrizzHacks 2017-2019
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Skills

Languages	Software	Libraries/Services	Hardware
C#, Python, Javascript, Swift, HTML, CSS, GLSL	Unity, Xcode, Git, Blender, Charles Web Proxy, Figma, Postman, Jira	Firebase, Three.js, WebXR, RealityKit, MRTK, FFmpeg, GCP, Anti-captcha	Apple Vision Pro, Magic Leap 2, Hololens 2, Valve Index, Oculus DK2

Hackathons Awards

BrickHack V: <i>Verizon's Challenge</i>	MHacks 11: <i>2nd Place</i>
Riot Games Hackathon 2018: <i>Honorable Mention</i>	SpartaHack V: <i>2nd Place</i>
Junction Tokyo: <i>Softbank's and IBM's Challenges</i>	SpartaHack IV: <i>2nd Place</i>
Hack The North 2017: <i>Google's Challenge</i>	HackCWRU 2018: <i>2nd Place</i>
Hack The North 2016: <i>Top 12, Firebase's Challenge</i>	SpartaHack: <i>3rd Place, Most Creative</i>