

ZONGZHEN (JACK) YANG

Seattle, WA | jackyangzzh@gmail.com | jackyang.io | [linkedin.com/in/jackyangzzh](https://www.linkedin.com/in/jackyangzzh) | github.com/jackyangzzh

Software engineer building real-time AI agents in production, including Facilitator, Microsoft’s agent that participates in live, multi-person Teams meetings. Seven years shipping real-time, multimodal human-computer interaction at scale: expressive avatars, embodiment, and XR for Microsoft Mesh. M.S. in Computer Science (HCI) in progress at Georgia Tech; paper under review at CHI 2027.

CORE COMPETENCIES

- Real-Time Multimodal Interaction
 - Human-Computer Interaction Design
- Conversational AI Systems
 - LLM Agents & Tool Orchestration
- Cross-Platform UI System
 - Performance Optimization

TECHNICAL SKILLS

Languages: C#, C++, TypeScript, JavaScript, Python, Swift
AI / Cloud / Tools: Large Language Models (LLMs), AI Agents, Retrieval-Augmented Generation (RAG), Model Context Protocol (MCP), A2A, Tool Calling, Context Management, Observability, Agent Skills, Agentic Coding, PyTorch, OpenCV, Azure, ROS, React, Git
XR / Graphics / 3D: Unity, Unreal, OpenXR, WebXR, visionOS, OpenGL, Vulkan, DirectX, Three.js, Babylon.js, Blender, 3D Math

PROFESSIONAL EXPERIENCE

- Microsoft**
Software Engineer II, Teams AI

Redmond, WA
September 2024 – Present

 - Build Facilitator, Microsoft’s conversational AI agent that participates in live, multi-party Teams meetings, shipping real-time notes, agenda tracking, decision capture, and in-meeting Q&A to Microsoft 365 Copilot customers.
 - Design the turn-taking layer of a proactive agent: when and how the AI speaks into a live group conversation without interrupting.
 - Drive early-stage initiatives integrating multimodal LLMs into spatial collaboration experiences (details under NDA).
- Software Engineer II, Mixed Reality (Microsoft Mesh)*

June 2022 – September 2024

 - Engineered the shared UI framework behind Microsoft Mesh and Avatars in Teams for millions of users, defining reusable interaction patterns, input abstractions, accessibility integration, and spatial UI components adopted by every Mesh product team.
 - Key contributor to the real-time avatar rendering and performance pipeline across HoloLens, Quest, web, and desktop; profiled CPU/GPU frame budgets and applied LOD switching and GPU instancing to sustain target framerates on constrained hardware.
 - Shipped end-to-end avatar customization and character-building systems with data-driven content pipelines, weekly releases, and 20+ language localization; Satya Nadella showed the outfit-selection flow at Microsoft Ignite.
- Holos Inc.**
AR/VR Interaction Engineer

<https://holos.io/>
February 2019 – May 2022

 - Built a networked AR/VR training simulator with hand tracking, gesture recognition, and physics for enterprise and government clients.
 - Created 3D model import workflows that cleaned up scale, pivots, colliders, and interaction settings, and connected authoring to the simulation runtime so new training content didn’t need a separate app.
 - Prototyped and shipped multiplayer networking and virtual object manipulation features, directly contributing to a \$750K U.S. Air Force research contract and Techstars acceptance.

RESEARCH & PROJECTS

- FakeHaul**
Creator & Developer (Next.js | React | TypeScript | Azure OpenAI)

fakehaul.com
July 2026 – Present

 - Launched a \$0.00-checkout mock store with about 1,800 AI-generated products that peaked at 3K daily active users; covered by The New York Times and Fast Company.
- UW Graphics Group**
Graphics Researcher

Madison, WI
September 2020 – May 2022

 - Built a real-time VR control loop mapping hand gestures to remote robotic-arm manipulation, plus a Unity UI for replaying arm motion from 15+ lab-experiment datasets.
- Kats Research Group**
AR/VR Researcher

Madison, WI
October 2017 – May 2022

 - Built chromatic-adjustment AI algorithms on hyperspectral imagery (90% accuracy simulating color-vision deficiency) and color-calibrated VR simulations on Oculus HMDs; co-authored an arXiv publication.

EDUCATION AND CREDENTIALS

Georgia Institute of Technology | *M.S. in Computer Science (Human-Computer Interaction)*
University of Wisconsin–Madison | *B.S. in Computer Science & Communication Arts (double major)*

Expected Spring 2027
August 2016 – June 2020

- Teaching assistant for CS 559 (Computer Graphics) for 350+ students across 2 semesters.