Sonia Lin

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Personal Portfolio: https://sonialin144.github.io/Portfolio-v2/

EDUCATION

University of Michigan, *Ann Arbor, MI*
B.S.E. in Computer Science   *Expected Apr 2025*

WORK EXPERIENCE

AiRPlay - Research Assistant (Development Team)   *Dec 2022 - Present*
- Collaborating with a multidisciplinary research team led by three professors to improve an inclusive augmented reality game system for players with different mobilities
- Utilizing OpenCV to optimize player detection and implementing new games through the Unity-ROS2 bridge, resulting in a fully immersive and interactive gaming experience
- Achieved a 10% reduction in latency, optimizing system performance and enhancing user experience
- Conducted playtesting sessions involving more than 20 participants to collect valuable feedback

Emerging Technologies Group - XR Student Consultant   *May 2023 - Sep 2023*
- Developed a VR experience to educate a class of over 30 students about nuclear reactors and their impact
- Created an interactive labeling system using Unreal Engine 4 to enhance students' understanding of nuclear reactor components
- Produced procedurally generated realistic residential and civilian environments with Blender, Houdini, and Unreal Engine, enabling engaging focus group discussions during community outreach

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PROJECTS

1:AM Train   *Apr 2023*
- Built a VR journal application to support mental wellbeing using Unity/C# and Meta Voice SDK
- Designed and programmed core game scene transitions, UI, animations, audio, particle effects, and shaders
- Awarded Best Environment at the XR @ Michigan 2023 Student Showcase

CLAWS - NASA Suits Challenge   *Mar 2023 - May 2023*
- Deployed augmented reality scenes using Unity and Microsoft MRTK to construct effective AR interfaces for astronauts on the HoloLens 2
- Implemented scripts to support collecting geological samples and photo captures
- Collaborated with the UI/UX team to create effective AR interfaces and ensure seamless user experiences

Cygnus @ MIT Reality Hack   *Jan 2023*
- Created an immersive and interactive storytelling experience for the Looking Glass Portrait using Leap Motion controllers in a group of 5 within a 72 hour limit
- Developed hand tracking features with Ultraleap's Unity plugin to enhance user interactions

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LEADERSHIP

Alternate Reality Initiative - Board Member   *Jun 2023 - Present*
- Assisted leading the university's XR Club, significantly expanding membership by developing a compelling VR demo and promotional posters
- Spearheaded workshops on XR topics like 3D modeling and Unity programming, fostering student engagement and skill development
- Revamped the club's newsletter, boosting subscriptions by 30% and enhancing content delivery
- Collaborated with Visit Detroit to develop a AR mobile tourism app with Unity/C# and Google's Geospatial API

Relevant Coursework: Data Structures and Algorithms, Web Design Development and Accessibility, Digital Product Design, UI/UX Development, Intro to VR, Extended Reality and Society, Intro to Computer Vision
Programming Languages: Java, C#, C/C++, Python, HTML/CSS, JavaScript, Swift
Software/Other: Adobe Photoshop, Figma, Blender, Git, Jira, Unity, Unreal 4/5, Houdini, React, Vue