YIFAN (ALVIN) JIANG

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EDUCATION

University of Rochester, Rochester, NY, USA Aug. 2024–May 2026
M.S. in Computer Science
Relevant Courses: AR/VR Interaction Design; Computer Imaging & Graphics; End-to-End Deep Learning; Natural Language Processing; Parallel & Distributed Systems

University of Rochester, Rochester, NY, USA Aug. 2020–May 2024
B.S. in Computer Science
Relevant Courses: Human-Computer Interaction; Machine Vision; Data Mining; Computer Organization; Mobile App Development (iOS); C/C++ Programming

RESEARCH INTERESTS

I am deeply interested in **Human–Computer Interaction (HCI)**, **Educational Technology (EduTech)**, and **AI literacy**, with a particular emphasis on designing immersive AR/VR systems that integrate **LLM agents** to support natural, multimodal interactions.

RESEARCH EXPERIENCE

AYXR Lab, Raleigh, NC, USA (remote) May 2025–Present
Research Assistant
Supervisors: Yichen Yu (Lead Scientist) & Prof. Qiao Jin (Assistant Professor)

inter.play Lab, University of Rochester Mar. 2025–Present
Research Assistant
Supervisor: Prof. Zhen Bai

RESEARCH PUBLICATIONS

Yu, Y.†, **Jiang, Y.**†, Lui, M., & Jin, Q. (2025). *GenLARP: Enabling Immersive Live Action Role-Play through LLM-Generated Worlds and Characters.* (*IEEE ISMAR 2025*).
†Co-first authors.

MANUSCRIPTS UNDER REVIEW

Farhadi, E.†, Fei, K.†, **Jiang, Y.**, & Bai, Z. (2025). *BeeCurious: Exploring and Breaking the Filter Bubble Effect in K-12 Education through a Minecraft-Based Learning Environment.* (Under review at *AAAI/EAAI 2026*).

RESEARCH PROJECTS

***GenLARP*: Enabling Immersive Live Action Role-Play through LLM-Generated Worlds and Characters** May 2025–Present

AYXR Lab *Planned submission: IEEE ISMAR 2026*

- Extending prior work to a multi-user collaborative environment enabling co-creation, synchronized role-playing, and negotiation between participants for richer narrative engagement.
- Integrating long-term memory persistence and multimodal input (e.g., sketches, voice, soundscapes) to improve narrative coherence and support diverse, user-driven scene construction.

***Chameleon*: Unobtrusive Substitution of Real-World Obstacles in VR with Risk-Level-Aware Adaptation** May 2025–Present

AYXR Lab *Planned submission: UIST 2026*

- Developing baseline methods to assess and highlight risk levels of surrounding physical objects in VR.
- Building an experimental system that categorizes surrounding physical objects into three risk levels and replaces them with graded mesh cues to enhance risk-aware adaptation.

From Bee to Builder: Empowering Young Learners to Modify and Create 3D Analogies for STEM Learning (*EmbodiedCreate*) Mar. 2025–Present

inter.play Lab *Planned submission: CHI 2026*

- Developed a system leveraging UnityMCP that empowered participants to generate Unity scenes to understand and explore the filter bubble effect in AI recommendation systems.
- Conducted an on-site user study (n=17) with K–12 students to evaluate system usability.

PROFESSIONAL EXPERIENCE

Dell Technologies, Beijing, China Jun. 2023–Aug. 2023

Software Engineer Intern

- Built a client query logging pipeline for ThinOS (BSD-based) using OpenTelemetry, enabling centralized analysis.
- Prototyped TPM passkey sealing to improve credential security during device provisioning.

TEACHING EXPERIENCE

CIS191: Introduction to Programming for Business Analytics Spring 2024

Teaching Assistant

CSC242: Introduction to Artificial Intelligence Spring 2023

Teaching Assistant

CSC172: Data Structures & Algorithms Fall 2022

Workshop Leader

SKILLS

Programming: Python, C#, C++, Java, Go, Rust, Swift, JavaScript
Frameworks/Libraries: PyTorch, NLTK, Scikit-learn
Systems: Linux, FreeBSD, macOS, Windows
Tools: Unity, Unreal Engine, Git, LaTeX, Jira
Languages: English (Fluent), Mandarin (Native)