Jiankun Yang

617-639-7670 | jyang118@u.rochester.edu | Portfolio | GitHub

Education Background

University of Rochester Rochester, NY

Bachelor of Science in Computer Science ***(Major GPA: 3.74/4.0)*** *Aug. 2022 – Present*

Bachelor of Science in Business Information Systems ***(Major GPA: 3.70/4.0)***

Relevant Courses

CSC 170 - Intro to Web Development (A)
CSC 171 - Intro to Computer Science (A-)
CSC 172 - Data Structures & Algorithms (A)
CSC 212 - Human Computer Interaction (A)
CSC 216 - AR/VR Design (A)
CSC 214 - Mobile App Development (A)
CSC 262 - Comp. Intro to Statistics (A)
CSC 210 - Web Programming (A)
CSC 395 - Independent Research (A)
CSC 413 - Introduction to Augmented and Virtual Reality (A)

Publications

- Yang Lu, Tianyu Zhang, Jiamu Tang, Yanna Lin, **Jiankun Yang**, Longyu Zhang, Shijian Luo, Yukang Yan. *Capability at a Glance: Design Guidelines for Intuitive Avatars Communicating Augmented Actions in Virtual Reality.* **(Accepted for publication at ACM CHI 2026)**
- Tianyu Zhang, Yang Lu, **Jiankun Yang**, Yukang Yan. *EmboDyverse: Investigating Effects of Virtual Hand Representations and Object Feedback on Embodiment.* **(Completed study; manuscript in preparation.)**
- Yang Lu, Jiamu Tang, **Jiankun Yang**, Shijian Luo, Chenliang Xu, Yukang Yan. *Tuning the Face: Modulating Facial Expressions for Realistic Self-Avatars in Virtual Reality.* **(Submitted to ACM DIS 2026, under review)**
- Tianyu Zhang, Shutong Wu, **Jiankun Yang**, Linh Tran, Yu Liu, Zhen Bai, Yukang Yan. *FocusAdapt: Context-aware Adaptive Focus Assistance in Diminished Reality.* **(In progress for ACM UIST 2026)**
- **Jiankun Yang***, Jiamu Tang* , Yukang Yan. *Fidelity: Selective Body Tracking for Privacy-Preserving Social VR.* **(In progress for ACM UIST 2026)**
- Shutong Wu, Tianyu Zhang, Yang Lu, **Jiankun Yang**, Jiamu Tang, Hecong Wang, Zhen Bai. *A Systematic Review of Analogy Generation and Evaluation: Methods, Metrics, and Challenges.* **(In progress for NMNLP 2026)**

Research and Work Experience

Undergraduate Research Assistant Jan. 2025 – Present

University of Rochester – BEAR Lab *Rochester, NY*

- Designed and developed an interactive VR system using Unity and C# for Meta Quest, enabling real-time hand tracking and object manipulation
- Preprocessed and analyzed EMG sensor data using Python, applying signal filtering, feature extraction, and machine learning for pattern recognition
- Led user study with 12 participants to evaluate system usability; contributed to statistical analysis and co-wrote paper

Software Developer May 2023 – Aug. 2023

Beijing CAS-Ruiyi Information Technology Co. Ltd. *Beijing, China*

- Developed responsive front-end features using React and React Hooks for cognitive testing applications
- Conducted data analysis on test results using Python and statistical methods to assess user performance
- Designed and styled multiple web pages with HTML, CSS, and JavaScript, ensuring cross-browser compatibility and accessibility

Teaching Assistant Jan. 2023 – Present

University of Rochester – Computer Science Department *Rochester, NY*

- Served as TA for CSC 170 (Web Development), CSC 212 (HCI), and CSC 214 (Mobile App Development)
- Held weekly office hours supporting 100+ students with debugging, design feedback, and project guidance
- Mentored students on front-end engineering, UI prototyping, usability evaluation, and mobile app development
- Provided detailed, actionable feedback on assignments and projects, helping students improve code quality and design decisions

Projects

Mixed Reality Piano Helper App | *Unity, C#, Blender, Meta Quest 3* Sep. 2025 – Dec. 2025

- Built a mixed reality piano training app for VR and AR passthrough mode using Unity and Meta Quest 3
- Displayed real-time key highlights and animated notes to guide users through songs
- Designed AR overlays that align with the physical keyboard for accurate passthrough interaction

- Implemented auto-page-flip and auto-play features for seamless music flow during performance
- Created interactive 3D piano assets with Blender and handled hand-tracking input using OVR SDK

EASE – Collaborative Learning Web App | *React, Google Firebase, Figma* Mar. 2024 – May 2024

- Collaborated in a 3-person team to design and develop EASE, a web app aimed at enhancing academic collaboration
- Led user research (surveys/interviews) to identify key needs—communication and calendar coordination
- Built the frontend in React and backend features with Firebase (real-time messaging and scheduling)
- Conducted usability testing with 14 users; over 70% preferred EASE to traditional platforms like Blackboard

Standard Test Score

- **GRE:** 328 Verbal: 163 (91%) Quantitative: 165 (67%) AW: 3.0 (17%) 05/27/2025

Technical Skills

- **Programming Languages:** C#, Java, Kotlin, C/C++, Python, JavaScript, HTML/CSS, R
- **Frameworks & Libraries:** React, Node.js, Flask
- **Game/AR/VR Development:** Unity, Unreal Engine 5, Blender