XINYU SHI

Ph.D. Candidate in School of Computer Science, University of Waterloo

Research Interests

Human-Computer Interaction, Design Intelligence, Creativity Support Tools

Education

2021 – 2026 Ph.D. in Computer Science

(Expected) University of Waterloo, Canada

Advisor: Jian Zhao

2016 - 2020 B.Eng. in Software Engineering

Xiamen University, China

Publications

- P Best Paper Award (top 1%)
- **Q** Best Paper Honorable Mention or Oral Presentation (top 5%)
- * Equal Contribution

Peer-reviewed Full-length Conference and Journal Papers

- 2024 [P.6] **Xinyu Shi**, Yinghou Wang, Yun Wang, Jian Zhao. Piet: Facilitating Color Authoring for Motion Graphics Video. *In Proceedings of the ACM CHI Conference on Human Factors in Computing Systems (CHI 2024).*
 - **P** Best Paper Award (top 1%).
- 2024 [P.5] **Xinyu Shi**, Mingyu Liu, Ziqi Zhou, Ali Neshati, Ryan Rossi, Jian Zhao. Exploring Interactive Color Palettes for Abstraction-Driven Exploratory Image Colorization. *In Proceedings of the ACM CHI Conference on Human Factors in Computing Systems (CHI 2024).*
- 2023 [P.4] **Xinyu Shi**, Ziqi Zhou, Julia Zhang, Ali Neshati, Anjul Kumar Tyagi, Ryan Rossi, Shunan Guo, Fan Du, Jian Zhao. De-Stijl: Facilitating Graphics Design with Interactive 2D Color Palette Recommendation. *In Proceedings of the ACM CHI Conference on Human Factors in Computing Systems (CHI 2023).*
- 2022 [P.3] Chaofeng Chen*, **Xinyu Shi***, Yipeng Qin, Xiaoming Li, Xiaoguang Han, Tao Yang, Shihui Guo. Real-World Blind Super-Resolution via Feature Matching with Implicit High-Resolution Priors. *In Proceedings of the ACM International Conference on Multimedia (MM 2022)*. **Q. Oral Presentation (top 5%).**
- 2020 [P.2] Qijia Shao, Amy Sniffen, Julien Blanchet, Megan E. Hillis, Xinyu Shi, Themistoklis K. Haris, Jason Liu, Melissa Malzkuhn, Lorna C. Quandt, James Mahoney, David J.M. Kraemer, Xia Zhou, Devin Balkcom. Teaching American Sign Language in Mixed Reality. In Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT 2020). Presented at UbiComp 2021.
- 2019 [P.1] Xinyu Shi*, Junjun Pan*, Zeyong Hu, Juncong Lin, Shihui Guo, Minghong Liao, Ye Pan, Ligang Liu. Accurate and Fast Classification of Foot Gestures for Virtual Locomotion. In Proceedings of the IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2019).

Professional Experience

Industry Research Experience

Summer 2024 Adobe Research, San Jose, CA, US

Research Intern

Mentors: Victor S. Bursztyn, Gromit Chan, Shunan Guo, Jane Hoffswell, Eunyee Koh, and

Chang Xiao (alphabetically ordered by last name).

Topic: creative design tools.

Summer 2023 Microsoft Research Asia, Beijing, China

Research Intern Mentor: Yun Wang.

Designed and developed a color authoring tool for motion graphics video. [P.6]

Academia Research Experience

Fall 2021 - University of Waterloo, Waterloo, ON, Canada

Present Graduate Student Researcher

Advisor: Jian Zhao.

Design, develop, and evaluate interactive systems to augment creativity. [P.4, P.5]

Fall 2020 - The Chinese University of Hong Kong, Shenzhen, Shenzhen, China

Summer 2021 Research Assistant

Advisor: Xiaoguang Han.

Proposed an approach based on VQ-GAN for Image Super-Resolution. [P.3]

Fall 2019 - **Dartmouth College**, Hanover, NH, US

Winter 2020 Research Assistant

Advisor: Xia Zhou.

Leveraged wearable devices & Mixed Reality for Sign-Language teaching. [P.2]

Fall 2017 - Xiamen University, Xiamen, China

Summer 2019 Undergraduate Research Assistant

Advisor: Shihui Guo.

Exploited wearable devices for VR locomotion with gesture recognition. [P.1]

Awards and Honors

2024 Best Paper Award, ACM CHI

2022 – 2024 International Doctoral Student Award, University of Waterloo

2021 Vector Scholarship in AI, Vector Institute

2021 – 2022 Mathematics International Master's Award of Excellence, University of Waterloo

2016 - 2020 Award for Excellence in Academic Performance, Xiamen University

Services

Paper Review

2024 CHI, CHI LBWs, DIS, C&C, VIS, UIST

Technical Skills

Programming Python, HTML/CSS/JavaScript, C/C++, Java

Framework PyTorch, React.js, Flask