Xinyu Shi

Ph.D. Candidate in School of Computer Science, University of Waterloo
xinyu.shi@uwaterloo.ca https://xinyu-shi.github.io/

Research Interests

Human-Computer Interaction, Design Intelligence, Creativity Support Tools

Education

2021 – 2026 (Expected)
Ph.D. in Computer Science
University of Waterloo, Canada
Advisor: Jian Zhao

2016 – 2020
B.Eng. in Software Engineering
Xiamen University, China

Publications

Best Paper Award (top 1%)
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).*
Best Paper Award.

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).*
Oral Presentation.

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, USA
Research Intern
Mentors: Eunyee Koh, Jane Hoffswell, Shunan Guo, Gromit Chan, Chang Xiao, and Victor S. Bursztyn.
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 – Present — **University of Waterloo**, Waterloo, Canada
Graduate Student Researcher
Advisor: Jian Zhao.
Design, develop, and evaluate interactive systems to augment creativity. [P.4, P.5]

Fall 2020 – Summer 2021 — **The Chinese University of Hong Kong, Shenzhen**, Shenzhen, China
Research Assistant
Advisor: Xiaoguang Han.
Proposed an approach based on VQ-GAN for Image Super-Resolution. [P.3]

Fall 2019 – Winter 2020 — **Dartmouth College**, Hanover, USA
Research Assistant
Advisors: Xia Zhou and Xing-Dong Yang.
Leveraged wearable devices & Mixed Reality for Sign-Language teaching. [P.2]

Fall 2017 – Summer 2019 — **Xiamen University**, Xiamen, China
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 (×3), CHI LBW (×3), DIS (×1), C&C (×1), VIS (×1), UIST (×1)

Technical Skills

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

Framework — PyTorch, React.js, Flask