

XINYU SHI

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

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Research Interests

Human-Centered AI, Human-Computer Interaction, 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

Professional Experience

Summer 2024 **Adobe Research**, San Jose, CA, US
Research Scientist Intern
Mentors: [Shunan Guo](#), [Jane Hoffswell](#), [Gromit Chan](#), [Eunye Koh](#)
Designed and developed a sketch-based infographics authoring tool.

Summer 2023 **Microsoft Research Asia**, Beijing, China
Research Scientist Intern
Mentor: [Yun Wang](#).
Designed and developed a color authoring tool for motion graphics video.

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.

Fall 2019 – **Dartmouth College**, Hanover, NH, US
Winter 2020 Research Assistant
Advisors: [Xia Zhou](#), [Xing-Dong Yang](#).
Leveraged wearable devices & Mixed Reality for Sign-Language teaching.

Peer-reviewed Full-length Publications

🏆 Best Paper Award (top 1%); 🏅 Best Paper Honorable Mention or Oral Presentation (top 5%); * Equal Contribution.

2025 [P7] **Brickify: Enabling Expressive Design Intent Specification through Direct Manipulation on Design Tokens.**

[Xinyu Shi](#), Yinghou Wang, Ryan Rossi, Jian Zhao.

To appear in *Proc. ACM Human Factors in Computing Systems (CHI 2025)*.

- 2024 [P6] **Piet: Facilitating Color Authoring for Motion Graphics Video.**
Xinyu Shi, Yinghou Wang, Yun Wang, Jian Zhao.
Proc. ACM Human Factors in Computing Systems (CHI 2024).
 🏆 **Best Paper Award (top 1%).**
- 2024 [P5] **Exploring Interactive Color Palettes for Abstraction-Driven Exploratory Image Colorization.**
Xinyu Shi, Mingyu Liu, Ziqi Zhou, Ali Neshati, Ryan Rossi, Jian Zhao.
Proc. ACM Human Factors in Computing Systems (CHI 2024).
- 2023 [P4] **De-Stijl: Facilitating Graphics Design with Interactive 2D Color Palette Recommendation.**
Xinyu Shi, Ziqi Zhou, Julia Zhang, Ali Neshati, Anjul Kumar Tyagi, Ryan Rossi, Shunan Guo, Fan Du, Jian Zhao.
Proc. ACM Human Factors in Computing Systems (CHI 2023).
- 2022 [P3] **Real-World Blind Super-Resolution via Feature Matching with Implicit High-Resolution Priors.**
 Chaofeng Chen*, Xinyu Shi*, Yipeng Qin, Xiaoming Li, Xiaoguang Han, Tao Yang, Shihui Guo.
Proc. ACM Multimedia (MM 2022).
 🗣️ **Oral Presentation (top 5%).**
- 2020 [P2] **Teaching American Sign Language in Mixed Reality.**
 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.
Proc. ACM Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), Presented at UbiComp 2021.
- 2019 [P1] **Accurate and Fast Classification of Foot Gestures for Virtual Locomotion.**
Xinyu Shi*, Junjun Pan*, Zeyong Hu, Juncong Lin, Shihui Guo, Minghong Liao, Ye Pan, Ligang Liu.
Proc. IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2019).

Awards and Honors

- 2024 **ACM CHI Best Paper Award** as first author (Piet [P6])
- 2024 – 2025 **Special Recognitions for Exceptional Reviews**, ACM CHI (2024×1, 2025×1)
- 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

Academic Services

Program Committee

- 2025 International Program Committee (IPC) Member, Graphics Interfaces (GI)
- 2025 Program Committee (PC) Member, Creativity & Cognition (C&C)

Conference Reviewer

- 2024 – 2025 SIGCHI Conference on Human Factors in Computing Systems (CHI)
- 2024 ACM User Interface Software and Technology Symposium (UIST)

- 2024 IEEE Visualization and Visual Analytics Conference (VIS)
- 2024 SIGCHI Late Breaking Work (CHI LBW)
- 2024 ACM Conference on Designing Interactive Systems (DIS)
- 2024 Creativity & Cognition (C&C)

Teaching Experience

Teaching Assistant, University of Waterloo

- CS 246 Object-Oriented Software Development. (Winter 2022, Fall 2023, Winter 2025)
- CS 251 Computer Organization and Design. (Spring 2022, Winter 2023)
- CS 234 Data Types and Structures. (Fall 2022)
- CS 115 Introduction to Computer Science. (Fall 2021)