# XINYU SHI

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

https://xinyu-shi.github.io/

# **Research Interests**

Human-Centered AI, Human-Computer Interaction, Creativity Support Tools

# Education

2021 - 2026

Ph.D. in Computer Science

(Expected)

University of Waterloo, Canada

11

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). https://doi.org/10.1145/3613904.3642711
  - **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). https://doi.org/10.1145/3613904.3642223
- 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)*. https://dl.acm.org/doi/10.1145/3544548.3581070
- 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)*. https://dl.acm.org/doi/abs/10.1145/3503161.3547833

  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.* https://dl.acm.org/doi/10.1145/3432211

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). https://ieeexplore.ieee.org/document/8943618

### Manuscript and On-going Work

2024 [M.1] **Xinyu Shi**, Yinghou Wang, Ryan Rossi, Jian Zhao. Duplo: Enabling Expressive Design Intent Specification through Direct Manipulation on Design Tokens. *Under Review.* 

# **Professional Experience**

Summer 2024 Adobe Research, San Jose, CA, US

Research Scientist Intern

Mentors: Shunan Guo, Jane Hoffswell, Gromit Chan, Eunyee Koh

Topic: creative generative AI-powered design tools.

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.

# **Awards and Honors**

- 2024 Best Paper Award, ACM CHI
- - 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**

**Paper Review** 

- 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 Computers & Graphics (C&C)