Hui Ye

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Research Focus

My research interests lie in the intersection of Human-Computer Interaction (HCI) and Computer Graphics (CG). Specifically, my main research focus is on exploring novel mobile AR prototyping tools and techniques for 3D contents and interactions.

Education

- **City University of Hong Kong (CityU)**　　　　　　　　　　**Sep 2017-Aug 2022**
  Ph.D. in Creative Media
  Supervisor: Prof. Hongbo Fu
  Thesis: 3D Content and Interaction Prototyping with Mobile Augmented Reality

- **University of Science and Technology of China (USTC)**　　**Sep 2012-June 2016**
  B.A. in Communication
  Minor in Computer Science and Technology

Experience

- **RGC Postdoctoral Fellow, City University of Hong Kong**　　**Sep 2022-Current**
  Supervisor: Prof. Hongbo Fu

- **Research Assistant, City University of Hong Kong**　　**Sep 2021-Aug 2022**
  Supervisor: Prof. Hongbo Fu

- **Visiting Ph.D. student, Tsinghua University**　　**Dec 2019-Apr 2020**
  Institute of HCI and Media Integration
  Advisors: Dr. Chun Yu and Prof. Hongbo Fu

- **City University of Hong Kong**　　**Sep-Dec 2014**
  Exchange student

Publications

- **Hui Ye**, Jiaye Leng, Chufeng Xiao, Lili Wang and Hongbo Fu. 2023. ProObjAR: Prototyping Spatially-aware Interactions of Smart Objects with AR-HMD. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* (*CHI 2023*).

- **Hui Ye** and Hongbo Fu. 2022. ProGesAR: Mobile AR Prototyping for Proxemic and Gestural Interactions with Real-world IoT Enhanced Spaces. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems* (*CHI 2022*).

- **Hui Ye**, Kin Chung Kwan, and Hongbo Fu. 2021. 3D Curve Creation on and around Physical Objects with Mobile AR. In *IEEE Transactions on Visualization and Computer Graphics* (*TVCG*).

- **Hui Ye**, Kin Chung Kwan (joint first author), Wanchao Su, and Hongbo Fu. 2020. ARAnimator: In-situ Character Animation in Mobile AR with User-defined Motion Gestures. In *ACM Transactions on Graphics* (*Special Issue of ACM SIGGRAPH 2020*).

- Wanchao Su, **Hui Ye**, Shuyu Chen, Lin Gao, and Hongbo Fu. 2022. DrawingInStyles: Portrait Image Generation and Editing with Spatially Conditioned StyleGAN. In *IEEE Transactions on Visualization and Computer Graphics* (*TVCG*).

- Xuanyu Wang, **Hui Ye**, Christian Sandor, Weizhan Zhang, and Hongbo Fu. 2022. Predict-and-Drive: Avatar Motion Adaption in Room-Scale Augmented Reality Telepresence with Heterogeneous Spaces.

In *IEEE Transactions on Visualization and Computer Graphics (TVCG): Special Issue for IEEE ISMAR 2022*.

○ Yanxiang Zhang and **Hui Ye**. 2016. Time-Based Nonlinear Interactive Player. In *International Conference on Augmented Reality, Virtual Reality and Computer Graphics*. Springer, Cham.

○ Yanxiang Zhang, Yun Zhu, **Hui Ye**. 2015. The Design of an Augmented Reality Based Rigid Body Motion Experiment System. In *Applied Mechanics and Materials*. Trans Tech Publications Ltd.

Selected Honors & Awards

○ Science and Technology Progress Award of Anhui (Third Prize)	2023
○ **RGC Postdoctoral Fellowship**	2022
○ Outstanding Academic Performance Award of CityU	2021
○ Shidi CAD&CG Excellent Student Award	2021
○ Research Tuition Scholarship of CityU	2020
○ **Guo Moruo Scholarship (Top 1.7%, Highest Honor for USTC Undergraduates)**	2016
○ Merit Graduate of Anhui Province & USTC (Top 3%)	2016
○ Certificate of Honorary Rank of USTC (Top 5%)	2016
○ Outstanding Thesis of USTC	2016
○ Sun Bin Leadership Scholarship of USTC	2014
○ Aegon-Industrial Responsibility Scholarship of USTC	2014
○ Outstanding Instructor in "Science and Technology Week" of USTC	2013-15
○ Gold Award of Excellent Student Scholarship of USTC (Top 5%)	2013
○ Outstanding Young Volunteer of USTC	2013

Talks

○ **The Road from Communication to Computer Graphics** — Aug 2022
Invited Presenter, Student Colloquium, CAD&CG 2022+2023

○ **ProGesAR: Mobile AR Prototyping for Proxemic and Gestural Interactions with Real-worldIoT Enhanced Spaces** — May 2022
Conference Paper Presenter, CHI 2022

○ **Mobile AR Prototyping for Proxemic and Gestural Interactions** — Apr 2022
Invited Speaker, EAA Youth Academic Forum, Tianjin Fine Arts Institute

○ **Exploring Novel Mobile AR Prototyping Techniques and Tools for 3D Contents and Interactions** — Dec 2021
SIGGRAPH Thesis Fast Forward

○ **ARAnimator: In-situ Character Animation in Mobile AR with User-defined Motion Gestures**
Invited Speaker, Graphics And Mixed Environment Symposium (GAMES) — Sep 2021
Invited Speaker, SCM|ACIM Colloquium, CityU — Oct 2020
Conference Paper Presenter, SIGGRAPH 2020 — Aug 2020

○ **3D Curve Creation on and around Physical Objects with Mobile AR** — Mar 2021
Invited Speaker, IEEE VR 2021

○ **In-situ 3D Content Creation in Mobile AR** — Mar 2021
Invited Speaker, Affiliated Forum on Human, Technology and Future of IWHEC 2021

Teaching Experience

- Teaching Assistant, CityU SM1103A Introduction to Media Computing   2018 & 19 Fall
- Teaching Assistant, CityU SM2716 Physical Computing & Tangible Media   2018 Spring

Professional Service

- **Paper Review**: SIGGRAPH Asia 2023 & 2022, CHI 2023 & 2022 & 2020, PG 2023 & 2020, UIST 2022, MobileHCI 2022, IEEE VR 2021, IEEE AIVR 2021, IEEE TVCG, IEEE C&G, IEEE CG&A, Visual Computer
- **Program Committees**: CSCW 2024 (July) & 2023 (January), CHI 2024 & 2023 Late-Breaking Work, Jury Member of CHI 2022 Student Research Competition
- **Student Helper**: PG 2018

Skills

- **Programming Language**: C#, Swift, Python, JavaScript
- **Graphics Interface**: OpenCV, QT
- **Application Tools**: iOS App, ARKit, HoloLens, Mixed Reality Toolkit
- **Hardware**: HoloLens, Arduino, Motion Capture

Last updated on December 6, 2023