Hui Ye

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
o 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	
 Invited Presenter, Student Colloquium, CAD&CG 2022+2023 ProGesAR: Mobile AR Prototyping for Proxemic and Gestural Interactions with Real-worldIoT Enhanced Spaces Conference Paper Presenter, CHI 2022 	May 2022
 ProGesAR: Mobile AR Prototyping for Proxemic and Gestural Interactions with Real-worldIoT Enhanced Spaces 	May 2022 Apr 2022
 ProGesAR: Mobile AR Prototyping for Proxemic and Gestural Interactions with Real-worldIoT Enhanced Spaces Conference Paper Presenter, CHI 2022 Mobile AR Prototyping for Proxemic and Gestural Interactions 	·
 ProGesAR: Mobile AR Prototyping for Proxemic and Gestural Interactions with Real-worldIoT Enhanced Spaces Conference Paper Presenter, CHI 2022 Mobile AR Prototyping for Proxemic and Gestural Interactions Invited Speaker, EAA Youth Academic Forum, Tianjin Fine Arts Institute Exploring Novel Mobile AR Prototyping Techniques and Tools for 3D Contents and Interactions SIGGRAPH Thesis Fast Forward ARAnimator: In-situ Character Animation in Mobile AR with User-defined Motion Gestures 	Apr 2022 Dec 2021
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Teaching Experience

Teaching Assistant, CityU SM1103A Introduction to Media Computing

2018 & 19 Fall

o Teaching Assistant, CityU SM2716 Physical Computing & Tangible Media

2018 Spring

Professional Service

 Program Committees: CSCW 2023-24, SIGGRAPH Asia Emerging Technologies 2024, UbiComp/ISWC Notes and Briefs 2024, CHI Late-Breaking Work 2023-24, CHI Student Research Competition 2022

o Paper Reviewing

Conference: SIGGRAPH 2024, SIGGRAPH Asia 2022-23, CHI 2020/22/23/24, PG 2020/23, UIST 2022, MobileHCI 2022, IEEE VR 2021, IEEE AIVR 2021

Journal: ACM TOG, IEEE TVCG, IEEE TMC, IEEE C&G, IEEE CG&A, The Visual Computer

• Student Helper: PG 2018

Skills

o Programming Language: C#, Swift, Python, JavaScript

o Graphics Interface: OpenCV, QT

o Application Tools: iOS App, ARKit, HoloLens, Mixed Reality Toolkit

o Hardware: HoloLens, Arduino, Motion Capture

Last updated on March 25, 2023