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 (joint first author), Pengfei Xu, Karan Singh and Hongbo Fu. 2023. ProInterAR: A Visual Programming Platform for Creating Immersive AR Interactions. In *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems* (*CHI 2024*).
- **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

- **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
- **Paper Reviewing**

  Special Recognition for Outstanding Reviews CHI, CSCW, MobileHCI

  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

- **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 March 25, 2023