Hui Ye

Academic Building, HKUST, Clear Water Bay, Hong Kong 852-65769246

huiyehy@outlook.com https://huiye19.github.io

RESEARCH INTEREST

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 and programming tools and techniques for 3D contents and interactions.

EDUCATION

09/2017 - City University of Hong Kong (CityU)

08/2022 Ph.D. in Creative Media

Thesis: 3D Content and Interaction Prototyping with Mobile Augmented Reality

Supervisor: Prof. Hongbo Fu

Committee: Hongbo Fu, Kening Zhu, Weiyin Ma, Karan Singh

09/2012 - University of Science and Technology of China (USTC)

06/2016 B.Lit. in Communication (Guo Moruo Scholarship, Top 1.7%)

Minor in Computer Science and Technology

EXPERIENCE

07/2024 - The Hong Kong University of Science and Technology (HKUST)

Current RGC Postdoctoral Fellow

Supervisor: Prof. Hongbo Fu

09/2022 - City University of Hong Kong

06/2024 RGC Postdoctoral Fellow

Supervisor: Prof. Hongbo Fu

09/2021 - City University of Hong Kong

08/2022 Research Assistant

Supervisor: Prof. Hongbo Fu

12/2019 - Tsinghua University

04/2020 Institute of HCI and Media Integration

Visiting Ph.D. Student

Supervisor: Prof. Chun Yu & Prof. Hongbo Fu

PULICATIONS

- P1 **Hui Ye**, Jiaye Leng (joint first author), Pengfei Xu, Karan Singh, and Hongbo Fu. ProInterAR: A Visual Programming Platform for Creating Immersive AR Interactions. *In Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems*. ACM, 2024. **(CHI 2024)**
- P2 **Hui Ye**, Jiaye Leng, Chufeng Xiao, Lili Wang, and Hongbo Fu. ProObjAR: Prototyping Spatially-aware Interactions of Smart Objects with AR-HMD. *In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*. ACM, 2023. **(CHI 2023)**
- P3 **Hui Ye** and Hongbo Fu. 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*. ACM, 2022. **(CHI 2022)**

- Hui Ye, Kin Chung Kwan (joint first author), Wanchao Su, and Hongbo Fu. ARAnimator: In-situ Character Animation in Mobile AR with User-defined Motion Gestures. ACM Transactions on Graphics (TOG): Special Issue for ACM SIGGRAPH 2020. ACM, 2020. (SIGGRAPH 2020)
- Hui Ye, Kin Chung Kwan, and Hongbo Fu. 3D Curve Creation on and around Physical Objects with Mobile AR. IEEE Transactions on Visualization and Computer Graphics. IEEE, 2021. (TVCG)
- P6 Linzi Qu, Jiaxiang Shang, **Hui Ye**, Xiaoguang Han, and Hongbo Fu. Sketch2Human: Deep Human Generation with Disentangled Geometry and Appearance Control. IEEE Transactions on Visualization and Computer Graphics. IEEE, 2024. (TVCG)
- Wanchao Su, Hui Ye, Shuyu Chen, Lin Gao, and Hongbo Fu. DrawingInStyles: Portrait Image Generation and Editing with Spatially Conditioned StyleGAN. IEEE Transactions on Visualization and Computer Graphics. IEEE, 2022. (TVCG)
- P8 Xuanyu Wang, **Hui Ye**, Christian Sandor, Weizhan Zhang, and Hongbo Fu. Predict-and-Drive: Avatar Motion Adaption in Room-Scale Augmented Reality Telepresence with Heterogeneous Spaces, IEEE Transactions on Visualization and Computer Graphics: Special Issue for IEEE ISMAR 2022. IEEE, 2022. (TVCG)
- Yanxiang Zhang and Hui Ye. Time-Based Nonlinear Interactive Player. In Augmented Reality, Virtual Reality, and Computer Graphics: Third International Conference, AVR 2016. Springer, 2016.
- Yanxiang Zhang, Yun Zhu, and Hui Ye. 2015. The Design of an Augmented Reality Based Rigid Body Motion Experiment System. Applied Mechanics and Materials. Trans Tech Publications Ltd, 2015.

PATENTS

- PT1 Hongbo Fu, Hui Ye, and Chufeng Xiao. Prototyping Applications Of Spatially Aware Smart Objects Using Augmented Reality. U.S. Patent 18/335,559, 2023.
- PT₂ Hongbo Fu and Hui Ye. Mobile AR Prototyping for Proxemic and Gestural Interactions with Real-world IoT Enhanced Spaces. U.S. Patent 17/810,714, 2022.

SELECTED HONORS & AWARDS

Science and Technology Progress Award of Anhui (Third Prize) 2023 2022 **RGC Postdoctoral Fellowship** Outstanding Academic Performance Award of CityU 2022 Shidi CAD&CG Excellent Student Award 2021 2020 Research Tuition Scholarship of CityU Guo Moruo Scholarship (Top 1.7%, Highest Honor for USTC Undergraduates) 2016 Merit Graduate of Anhui Province & USTC (Top 3%) 2016 Honorary Rank of Academic Achievement in USTC (Top 5%) 2016 2016 **Outstanding Thesis of USTC** 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**

TALKS

2013

05/2024	ProInterAR: A Visual Programming Platform for Creating Immersive AR Interactions. Conference Paper Presenter, CHI 2024
05/2023	ProObjAR: Prototyping Spatially-aware Interactions of Smart Objects with AR-HMD Conference Paper Presenter, CHI 2023
08/2022	From Communication to Computer Graphics Invited Presenter, Student Colloquium, CAD&CG 2022+2023
05/2022	ProGesAR: Mobile AR Prototyping for Proxemic and Gestural Interactions with Real-world IoT Enhanced Spaces Conference Paper Presenter, CHI 2022
04/2022	Mobile AR Prototyping for Proxemic and Gestural Interactions Invited Speaker, EAA Youth Academic Forum, Tianjin Fine Arts Institute
12/2021	Exploring Novel Mobile AR Prototyping Techniques and Tools for 3D Contents SIGGRAPH Thesis Fast Forward 2021
2020-21	ARAnimator: In-situ Character Animation in Mobile AR with User-defined Motion Gestures Invited Speaker, Graphics And Mixed Environment Symposium (GAMES), 09/2021 Invited Speaker, SCM ACIM Colloquium, CityU, 10/2020 Conference Paper Presenter, SIGGRAPH 2020, 08/2020
03/2021	3D Curve Creation on and around Physical Objects with Mobile AR Invited Speaker, IEEE VR 2021
03/2021	In-situ 3D Content Creation in Mobile AR Invited Speaker, Affiliated Forum on Human, Technology and Future of IWHEC 2021

TEACHING EXPERIENCE

Teaching Assistant, SM1103A Introduction to Media Computing, CityU
 Teaching Assistant, SM2716 Physical Computing & Tangible Media, CityU

PROFESSIONAL SERVICE

Conference Chair

2024 Organization Co-Chair of The 13th international conference on Computational Visual Media (CVM 2025)

2024 Session Chair of Immersive Experiences: Creating and Communicating in CHI 2024

Program Committees

2023-24 ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW)

2024 Pacific Graphics (PG)

2024 ACM Special Interest Group on Computer Graphics (SIGGRAPH Asia) Emerging Technologies

2024 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp/ISWC) Notes and Briefs

2023-24 ACM Conference on Human Factors in Computing Systems (CHI) Late-Breaking Work ACM Conference on Human Factors in Computing Systems (CHI) Student Research Competition

Conference Review

2020-24 ACM Conference on Human Factors in Computing Systems (CHI): Special Recognitions for Outstanding Reviews

2023-24 ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW): Special Recognitions for Outstanding Reviews

ACM Symposium on User Interface Software and Technology (UIST) 2024 ACM Special Interest Group on Computer Graphics (SIGGRAPH) 2024 ACM Special Interest Group on Computer Graphics (SIGGRAPH Asia) 2022-23 Pacific Conference on Computer Graphics and Applications (PG) 2020/23 ACM Symposium on User Interface Software and Technology (UIST) 2022 ACM International Conference on Mobile Human-Computer Interaction (MobileHCI): 2022 Special Recognitions for Outstanding Reviews IEEE Virtual Reality (VR) 2021 IEEE International Conference on Artificial Intelligence and Virtual Reality (AIVR) 2021

Journal Review

- 2024 ACM Transactions on Graphics (TOG)
- 2024 IEEE Transactions on Mobile Computing (TMC)
- 2023 Computers & Graphics (C&G)
- 2023 IEEE Computer Graphics and Applications (CG&A)
- 2023 The Visual Computer (TVC)
- 2022 IEEE Transactions on Visualization and Computer Graphics (TVCG)

Student Helper

2018 Pacific Conference on Computer Graphics and Applications (PG)

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