Stuttgart Center for Simulation Science (SimTech) Perceptual User Interfaces Group Computational Biophysics and Biorobotics Group University of Stuttgart, Germany © 015236115427 Examing.hu@simtech.uni-stuttgart.de Cranehzm.github.io Ph.D.

Zhiming Hu

Curriculum Vitae

Research Interests

My research interests include virtual reality, visual attention, human-computer interaction, eye tracking, and human intention prediction. During my Ph.D. career, I focused on analysis, prediction, and recognition of human visual attention in virtual reality. I am now extending my research to human intention prediction, especially human arm movement prediction.

Academic Positions

Post-doctoral Researcher

2022.08-now

Perceptual User Interfaces Group, Led by Prof. Andreas Bulling Computational Biophysics and Biorobotics Group, Led by Prof. Syn Schmitt Stuttgart Center for Simulation Science (SimTech) University of Stuttgart

Education

Ph.D. in Computer Software and Theory
 Graphics & Interactive Lab., Peking University, Supervised by Prof. Guoping Wang
 B.Eng. in Optical Engineering
 School of Optics and Photonics, Beijing Institute of Technology

Teaching Activities

Invited Speaker

- Human-Computer Interaction, Peking University, 2021
- Orientation Course for Freshmen: University, Youth, and Life, Beijing Institute of Technology, 2017

Teaching Assistant

• Computer Graphics, Peking University, 2018

- o Image and Video-Based 3D Reconstruction, Peking University, 2018
- o Programming Basics, Peking University, 2018

—— Professional Activities

Reviewing

- o 2022: CVPR, IEEE VR, IJHCI, ECCV, ISMAR
- 2021: IMWUT, TVCG, ICCV, IEEE VR, ISMAR
- 2020: TVCG, IEEE VR, ISMAR

Organizing Committee

• Technical program committee member for I-SCMT 2022

Invited Talks

- o Southeast University, China, Hosted by Prof. Ding Ding, June, 2022
- o IEEE VR 2022, Hosted by Prof. Kiyoshi Kiyokawa, March, 2022
- o GAMES Webinar 2021, Hosted by Prof. Xubo Yang, September, 2021
- 2019 International Conference on VR/AR and 3D Display, Hosted by Prof. Feng Xu, June 2019

Awards & Honors

- Outstanding Graduates Prize in Peking University, 2022
- National Scholarship, 2021
- TVCG Best Journal Nominees Award (IEEE VR 2021), 2021
- CSC (China Scholarship Council) Scholarship, 2020
- Second-Class Scholarship of Peking University, 2020
- Chancellor's Scholarship, 2020
- Leo KoGuan Scholarship, 2019
- Leader Scholarship, 2017
- Outstanding Graduates Prize in Beijing Institute of Technology, 2017
- National Scholarship, 2016
- Honorable Mention of Mathematical Contest in Modeling, 2016
- National Encouragement Scholarship, 2015
- Third Prize of the National College Students Composition Competition, 2015
- Third Prize of Beijing Humanistic Knowledge Competition, 2014
- National Scholarship, 2014

—— Publications

Journal Articles:

1. Zehui Lin, Xiang Gu, Sheng Li, **Zhiming Hu**, Guoping Wang. Intentional Head-Motion Assisted Locomotion for Reducing Cybersickness. IEEE Transactions on Visualization

- and Computer Graphics, 2022.
- 2. **Zhiming Hu**, Andreas Bulling, Sheng Li, Guoping Wang. EHTask: Recognizing User Tasks from Eye and Head Movements in Immersive Virtual Reality. IEEE Transactions on Visualization and Computer Graphics, 2022.
- 3. **Zhiming Hu**, Sheng Li, Meng Gai. Research progress of user task prediction and algorithm analysis (in Chinese). Journal of Graphics, 2021, 42(3): 367-375.
- 4. **Zhiming Hu**, Andreas Bulling, Sheng Li, Guoping Wang. FixationNet: Forecasting Eye Fixations in Task-Oriented Virtual Environments. IEEE Transactions on Visualization and Computer Graphics, 2021, 27(5): 2681-2690.

TVCG Best Journal Nominees Award

- 5. **Zhiming Hu**, Sheng Li, Congyi Zhang, Kangrui Yi, Guoping Wang, Dinesh Manocha. DGaze: CNN-Based Gaze Prediction in Dynamic Scenes. IEEE Transactions on Visualization and Computer Graphics, 2020, 26(5): 1902-1911.
- 6. **Zhiming Hu**, Sheng Li, Meng Gai. Temporal continuity of visual attention for future gaze prediction in immersive virtual reality. Virtual Reality & Intelligent Hardware, 2020, 2(2): 142-152.
- 7. Zhiming Hu, Congyi Zhang, Sheng Li, Guoping Wang, Dinesh Manocha. SGaze: A Data-Driven Eye-Head Coordination Model for Realtime Gaze Prediction. IEEE Transactions on Visualization and Computer Graphics, 2019, 25(5): 2002-2010.

Conference Papers:

- 1. **Zhiming Hu**. Eye Fixation Forecasting in Task-Oriented Virtual Reality. Proceedings of the 2021 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops, 2021: 707-708.
- 2. **Zhiming Hu**. Gaze Analysis and Prediction in Virtual Reality. Proceedings of the 2020 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops, 2020: 543-544.