Zhiming Hu

Curriculum Vitae

Graphics & Interactive Technology Lab.
Peking University, China
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Ph.D. Candidate

Research Interests

My research interests include virtual reality, visual attention, human-computer interaction, and eye tracking. My previous works focus on analysis, prediction, and recognition of human visual attention in virtual reality. I am extending my research to the range of full human body including hand pose, body gesture, and speech.

Education

- **Ph.D.** in Computer Software and Theory   2017.09-2022.07 (expected)
  Graphics & Interactive Technology Lab., School of Computer Science, Peking University
  Supervisor: Prof. Guoping Wang
- **B.Eng.** in Optical Engineering   2013.09-2017.07
  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
- Image and Video-Based 3D Reconstruction, Peking University, 2018
- Programming Basics, Peking University, 2018

Professional Activities

Invited Talks

- IEEE VR 2022, March, 2022
- 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

Journal Reviewer

○ 2021: IMWUT, TVCG
○ 2020: TVCG

Conference Reviewer

○ 2022: CVPR, IEEE VR
○ 2021: ICCV, IEEE VR, ISMAR
○ 2020: IEEE VR, ISMAR

Awards & Honors

○ National Scholarship, 2021
○ Merit Student Prize in Peking University, 2021
○ TVCG Best Journal Nominees Award (IEEE VR 2021), 2021
○ CSC (China Scholarship Council) Scholarship, 2020
○ Second-Class Scholarship of Peking University, 2020
○ Merit Student Prize in Peking University, 2020
○ Chancellor's Scholarship, 2020
○ Leo KoGuan Scholarship, 2019
○ Hongcai Scholarship, 2019
○ Merit Student Prize in Peking University, 2019
○ Hongcai Scholarship, 2017
○ Leader Scholarship, 2017
○ Outstanding Graduates Prize in Beijing Institute of Technology, 2017
○ National Scholarship, 2016
○ Honorable Mention of Mathematical Contest In Modeling, 2016
○ Merit Student Prize in Beijing Institute of Technology, 2016
○ National Encouragement Scholarship, 2015
○ Merit Student Prize in Beijing Institute of Technology, 2015
○ Third Prize of The National College Students Composition Competition, 2015
○ Pacemaker to Merit Student Prize in Beijing Institute of Technology, 2014
○ 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 (Conditionally Accepted)

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, 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.