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教育与学术经历

香港科技大学（广州）, 中国 2025.08 至今

助理教授

斯图加特大学，德国 2022.08 – 2025.07

博士后，合作导师：Prof. Andreas Bulling & Prof. Syn Schmitt

北京大学，中国 2017.09 – 2022.07

博士，计算机软件与理论专业，导师：汪国平教授

北京理工大学，中国 2013.09 – 2017.07

本科，光电信息科学与工程专业

研究方向

虚拟现实与增强现实、人机交互、眼动追踪、具身智能、人本智能

荣誉奖励

- **ISMAR 2024 最佳期刊论文**（会议唯一）
- 德国巴登-符腾堡州基金会博士后研究学者，2024
- **INTERACT 2023 最佳学生论文提名**
- SimTech 博士后研究学者，2022
- 国家奖学金（前 2%），2021
- **IEEE VR 2021 最佳期刊论文提名**（国内首次）
- 国家留学基金委奖学金，2020
- 校长奖学金（前 2%），2020
- 廖凯原奖学金（前 5%），2019
- 领航奖学金（前 0.2%，7/3800），2017
- 国家奖学金（前 2%），2016
- 国家奖学金（前 2%），2014

科研项目

- 混合现实中复杂任务的眼动行为和视觉注意机制与眼动预测，国家自然科学基金委员会，面上项目（排名 3/9）

学术活动

论文审稿

- 期刊：TVCG，IMWUT，TMM，IJHCI，TiiS，MTAP, VR，BRM
- 会议：SIGGRAPH，CVPR，ICCV，ECCV，CHI，UIST，IEEE VR，ISMAR，AAAI，PG，ETRA

会议组织

- AAAI 2026 程序委员会成员
- ETRA 2025 展示与海报主席（Presentation and Poster Chair）
- AAAI 2025 程序委员会成员
- MuC 2024 副主席（Associate Chair）
- PETMEI 2024 程序委员会成员
- ETRA 2024 虚拟化主席（Virtualization Chair）
- MuC 2023 副主席（Associate Chair）
- iWOAR 2023 程序委员会成员

学术讲座

- 虚拟/增强现实环境中用户眼睛运动和身体运动的协调性，GAMES Webinar 2025，主持人：刘鑫达博士，2025.07
- 人类日常行为中的眼动身体运动协调性以及基于身体运动的眼动预测，ISMAR 2024，2024.10
- 注视引导的人体运动预测，IROS 2024 非语言的人机智能协作研讨会，主持人：Jouh Yeong Chew 博士，2024.10
- 以用户为中心的人工智能，南京大学第 11 届诚耀青年学者论坛，2023.12
- 用户感知智能交互系统，北京大学计算机学院第五届青年论坛，2023.12
- 眼动、身体运动、与场景的协调性研究，北京理工大学第十届“特立论坛”，主持人：王国仁教授，2023.11
- 数字人姿态协调性研究，北京大学计算机学院就业学术讲座，2022.11
- 虚拟现实环境中用户视觉注意的分析与预测，东南大学，主持人：丁玎教授，2022.06
- 沉浸式虚拟现实环境中基于眼动和头动信息的用户任务识别，IEEE VR 2022，主持人：Kiyoshi Kiyokawa 教授，2022.03
- 任务驱动虚拟现实场景中的用户注视预测，GAMES Webinar 2021，主持人：杨旭波教授，2021.09
- 虚拟现实环境中用户视觉注意的分析与预测，ChinaVR 2020 - IEEE VR 之夜主题论坛，主持人：王莉莉教授，2020.09
- 基于眼动头动协调性的注视预测模型，2019 国际 VR/AR 暨三维显示大会，主持人：徐枫教授，2019.06

教学经历

- 机器感知与学习，斯图加特大学，2022，讲师
- 计算机图形学，北京大学，2018，助教
- 基于图像和视频的三维重建，北京大学，2018 助教
- 编程基础，北京大学，2018，助教

发表文章

* 通讯作者 # 共同一作

期刊论文

1. **Zhiming Hu***, Guanhua Zhang, Zheming Yin, Daniel Haeufle, Syn Schmitt, Andreas Bulling. HaHeAE: Learning Generalisable Joint Representations of Human Hand and Head Movements in Extended Reality. IEEE Transactions on Visualization and Computer Graphics, 2025: 1-12. (**CCF A**)
2. **Zhiming Hu***, Zheming Yin, Daniel Haeufle, Syn Schmitt, Andreas Bulling. HOIMotion:

Forecasting Human Motion During Human-Object Interactions Using Egocentric 3D Object Bounding Boxes. IEEE Transactions on Visualization and Computer Graphics (ISMAR 2024 Journal-track), 2024, 30(11): 7375 - 7385. (**CCF A**, ***Best Journal Paper Award***)

3. **Zhiming Hu***, Jiahui Xu, Syn Schmitt, Andreas Bulling. Pose2Gaze: Eye-body Coordination during Daily Activities for Gaze Prediction from Full-body Poses. IEEE Transactions on Visualization and Computer Graphics (oral presentation at ISMAR 2024), 2025, 31(9): 4655-4666. (**CCF A**)
4. Yao Wang, Yue Jiang, **Zhiming Hu**, Constantin Ruhdorfer, Mihai Bâce, Andreas Bulling. VisRecall++: Analysing and Predicting Visualisation Recallability from Gaze Behaviour. Proceedings of the ACM on Human-Computer Interaction (PACM HCI), 2024, 8(ETRA): 1-18.
5. Mayar Elfares, Pascal Reisert, **Zhiming Hu**, Wenwu Tang, Ralf Küsters, Andreas Bulling. PrivatEyes: Appearance-based Gaze Estimation Using Federated Secure Multi-Party Computation. Proceedings of the ACM on Human-Computer Interaction (PACM HCI), 2024, 8(ETRA): 1-23.
6. 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, 2023, 29(8): 3458-3471. (**CCF A**)
7. **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, 2023, 29(4): 1992-2004. (**CCF A**)
8. **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.
9. **Zhiming Hu**, Andreas Bulling, Sheng Li, Guoping Wang. FixationNet: Forecasting Eye Fixations in Task-Oriented Virtual Environments. IEEE Transactions on Visualization and Computer Graphics (IEEE VR 2021 Journal-track), 2021, 27(5): 2681-2690. (**CCF A**, ***Best Journal Paper Nominees***)
10. **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 (IEEE VR 2020 Journal-track), 2020, 26(5): 1902-1911. (**CCF A**)
11. **Zhiming Hu**, Sheng Li, Meng Gai. Temporal continuity of visual attention for future gaze prediction in immersive virtual reality. Virtual Reality and Intelligent Hardware, 2020, 2(2): 142-152.
12. **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 (IEEE VR 2019 Journal-track), 2019, 25(5): 2002-2010. (**CCF A**)

会议论文

1. Chuhan Jiao, **Zhiming Hu***, Andreas Bulling. HAGI: Head-Assisted Gaze Imputation for Mobile Eye Trackers. Proceedings of the ACM Symposium on User Interface Software and Technology, 2025: 1-14. (**CCF A**)
2. **Zhiming Hu***, Daniel Haeufle, Syn Schmitt, Andreas Bulling. HOIGaze: Gaze Estimation During Hand-Object Interactions in Extended Reality Exploiting Eye-Hand-Head Coordination. Proceedings of the ACM Special Interest Group on Computer Graphics and Interactive Techniques, 2025: 1-10. (**CCF A**)

3. Guanhua Zhang, Mohamed Ahmed, **Zhiming Hu***, Andreas Bulling. SummAct: Uncovering User Intentions Through Interactive Behaviour Summarisation. Proceedings of the ACM CHI Conference on Human Factors in Computing Systems, 2025: 1-17. (**CCF A**)
4. Haodong Yan#, **Zhiming Hu#***, Syn Schmitt, Andreas Bulling. GazeMoDiff: Gaze-guided Diffusion Model for Stochastic Human Motion Prediction. Proceedings of the Pacific Conference on Computer Graphics and Applications, 2024: 1-12. (**CCF B**)
5. Guanhua Zhang, **Zhiming Hu***, Andreas Bulling. DisMouse: Disentangling Information from Mouse Movement Data via Diffusion Models. Proceedings of the ACM Symposium on User Interface Software and Technology, 2024: 1-13. (**CCF A**)
6. **Zhiming Hu***, Syn Schmitt, Daniel Haeufle, Andreas Bulling. GazeMotion: Gaze-guided Human Motion Forecasting. Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems, 2024: 13017-13022. (**top robotics conference, Oral Presentation**)
7. Guanhua Zhang, **Zhiming Hu***, Mihai Bâce, Andreas Bulling. Mouse2Vec: Learning Reusable Semantic Representations of Mouse Behaviour. Proceedings of the ACM CHI Conference on Human Factors in Computing Systems, 2024: 1-17. (**CCF A**)
8. Yao Wang, Weitian Wang, Abdullah Abdelhafez, Mayar Elfares, **Zhiming Hu***, Mihai Bâce, Andreas Bulling. SalChartQA: Question-driven Saliency on Information Visualisations. Proceedings of the ACM CHI Conference on Human Factors in Computing Systems, 2024: 1-14. (**CCF A**)
9. Chuhan Jiao, **Zhiming Hu***, Mihai Bâce, Andreas Bulling. SUPREYES: SUPer Resolution for EYES Using Implicit Neural Representation Learning. Proceedings of the ACM Symposium on User Interface Software and Technology, 2023: 1-13. (**CCF A**)
10. Guanhua Zhang, Matteo Bortoletto, **Zhiming Hu***, Lei Shi, Mihai Bâce, Andreas Bulling. Exploring Natural Language Processing Methods for Interactive Behaviour Modelling. Proceedings of the IFIP Conference on Human-Computer Interaction, 2023: 3-26.(***Best Student Paper Nominees***)

摘要与短文

1. Mayar Elfares, **Zhiming Hu**, Pascal Reisert, Andreas Bulling, Ralf Küsters. Federated Learning for Appearance-based Gaze Estimation in the Wild. Proceedings of the NeurIPS Workshop Gaze Meets ML, 2023: 20-36.
2. **Zhiming Hu**. Eye Fixation Forecasting in Task-Oriented Virtual Reality. Proceedings of the IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops, 2021: 707-708.
3. **Zhiming Hu**. Gaze Analysis and Prediction in Virtual Reality. Proceedings of the IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops, 2020: 543-544.