

Ziyao He (何梓垚)

Gender: Male Date of Birth: 1998.06

From: Team Prof. Xiaohong Guan (Academician of Chinese Academy of Sciences)

Supervisor: Prof. Zhongmin Cai Lab: MOE KLINNS Lab

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Research Interest: Human-AI interaction and cooperation, LLM-supported HCI, Chatbot

Education		Major	
➤	Xi'an Jiaotong University	Control Science and Engineering	2019-2025 PhD
➤	Xi'an Jiaotong University	Material Science and Engineering, Finance (GPA 3.64/4.30, Average 87.26)	2015-2019 B.S.
➤	Xi'an Gaoxin No.1 High School	(Tsien Hsue-shen class)	2011-2015 High School

Research

- National Key R&D Program: Hybrid Augmented Intelligence Modeling Methods for Major Power Grid Regulation (Behavior Modeling of Human Operators), implemented project outcomes (Publications 1 & 3), participated in drafting the project completion report and other technical, mid-term, and annual reports.
- Intelligent Human-Machine Interaction 2022: Drafted the proposal, designed and implemented the project plan, publications corresponded to Publications 2 & 4.
- Information Overload: Involved in proposal writing, project design, and implementation. Publications under review.
- National Natural Science Foundation: Human Intent Modeling and Understanding for Human-Machine Cooperation in Complex Tasks, Involved in the proposal writing and implemented the project.

Publications

1. He Z, Song Y, Zhou S, et al. Interaction of Thoughts: Towards Mediating Task Assignment in Human-AI Cooperation with a Capability-Aware Shared Mental Model[C]//Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems. 2023: 1-18. (CCF A)
2. He Z, Li S, Song Y, Cai Z. Towards Building Condition-Based Cross-Modality Intention-Aware Human-AI Cooperation under VR Environment[C]//Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems. 2024: 1-13. (CCF A)
3. He Z, Song Y, Yang G, et al. A dialogue-driven framework for intelligent and automated simulation of complex power systems[J]. CSEE Journal of Power and Energy Systems, 2023. (SCI, JCR: Engineering, Electrical & Electronic Q1, IF=7.1)
4. He Z, Cai Z. Enhancing Augmented Reality Dialogue Systems with Multi-Modal Referential Information[C]//2023 China Automation Congress (CAC). IEEE, 2023: 6838-6843.
5. Li B, He Z, Zhao J, et al. Advanced Se3P4@ C anode with exceptional cycling life for high performance potassium-ion batteries[J]. Small, 2020, 16(6): 1906595.

Skills

- Knowledge in machine learning, large language models, and reinforcement learning algorithms. Python, C++, and Shell (Linux), Skilled in deep learning frameworks such as PyTorch and Keras, Involved in deploying both open-source (Qwen, Llama, ChatGLM, etc.) and close-source (GPT-3.5 Turbo) large language models, and tuning projects using RLHF (Reinforcement Learning with Human Feedback).
- Language Proficiency: TOEFL: 108 (Reading 27, Listening 28, Speaking 26, Writing 27), GRE scores: Verbal 150, Quantitative 170, Writing 4. Extensive experience in writing academic papers and delivering presentations. Basic knowledge of German.
- User Testing and Data Analysis: Extensive experience in designing and implementing user testing, accompanied by related data analysis expertise.
- Leadership Experience: Led several master students as a group to complete projects of the LAB.

Other Rewards

- First-class Academic Scholarship for PhD Students, Xi'an Jiaotong University
- Second Prize in the Undergraduate Group of National College Student Mathematical Modeling Competition, Shaanxi Province
- 2018 National English Competition for College Students (NECCS), Second Prize (Non-English Major Undergraduates)