Yifan Zhu

(+86) 189-0385-6920 / zhuyifan2092@gmail.com

School of Management Science and Real Estate (6th in China), Chongqing University, China

Academic Qualifications

Master: Human-Computer Interaction (Ergonomic), Chongqing Univ.

2022-current GPA:3.72/4

<u>Thesis:</u> Study on the optimization of natural interaction of walking navigation aids based on spatial information (Supervisor: Prof. Jia Zhou, Major: Management Science and Engineering)

<u>Related courses:</u> Theory and Application of Mathematical Modeling, Decision-making Theory and Method, Psychological and Behavioral Statistics, Coursera Courses: Designing, Running and Analyzing Experiments

Bachelor: Industry Design, Chongqing Univ.

2018-2022, GPA:3.53/4 (National Scholarships)

<u>Thesis:</u> Study on the influence of trace and boundary on human spatial cognitive in virtual reality (Supervisor: Jia Zhou, Grade: Excellent)

Related courses: Interactive Design and User Experience, Ergonomics, Design Psychology, Electronic Engineering

Journal Papers

Zhu, Y., Liu, M., & Zhou, J. (2024). What Prevents Us from Learning Virtual Reality Space: A Study of Indoor Corridor Angle and Obstacle Transparency. *International Journal of Human–Computer Interaction*, 1–12 (JCR Q1)

Zhu, Y., & Zhou, J. (Under review). Reading digital maps while walking in virtual reality environment: Improving pedestrian safety and level of natural interaction

Zhu, Y., Cao, J., Zuo, Y., Liu, M., Sun, G., Zhou, J., An, N., et.al. (Under review). Denser Grid Patterns Correlate with More Precise Spatial Cognition

Conference Papers

Zhu, Y., Li, X., Zhou, J., & Jiang, Y. (2023). The Association Between Academic Clickbait and Impact: From the Perspective of Online Media News., *HCI International 2023 – Late Breaking Papers* (pp. 454–469).

Zhu, Y., Zuo, Y., Sun, G., & Zhou, J. (in press). Quantifying spatial ability through digital traces in mobile navigation games. *22nd Triennial Congress of the International Ergonomics Association 2024*.

Jiang, Y., Fan, S., **Zhu, Y.**, Wang, L., Ye, K., Zhou, J., Zhang, L., Wang, Z., Wu, L., & Rau, PLP. (in press). A Human-Centered Algorithmic Management Framework: A Literature Review. *HCI International 2024 – Late Breaking Papers*

Presentation

2022 Tsinghua Industrial Engineering PhD Student Conference

Student Presenter

《Routes matters during indoors navigation: A study of route trend and obstacle transparency》

Patent

An assisted toilet based on cams and linkages

China Invention Patent Disclosure (CN 112205909 A)

Han, D, Zhou, L., Zhu, K., Zhang, D., Zhu, Y., Dai, C., Zeng, Q.

Scholarships/Awards

2024	Chongqing University Advanced Individual in Academic Innovation (Top 5% in school)
2022, 2023	Chongqing University Postgraduate First-Class Academic Scholarship
2021	National Scholarship for the Undergraduate Student (Top 1% in University)
2020	9th National University Mechanical Innovation Design Competition, First Prize (Top 3% in China)
2019	Chongqing University Advanced Individuals in Innovation and Entrepreneurship (Top 5% in school)

Relevant Research Experience

2022-Current Research on Interactive Space Matching Mechanism and Efficiency Optimization

Sub-topic Leader

Sub-topic Leader

National Natural Science Foundation of China (NSFC) General Project

<u>Main duties:</u> Conducted research on the association between grid cell patterns and human spatial cognition; Developed code for the quantification of grid cell patterning; 2 experiments were conducted and 117 people participated in the VR experiment.

2023-Current Research on human-centered algorithmic management in engineering management Neuro-ergonomics and Management Innovation Research Centre

Main duties: Participated in researching 136 articles to construct a conceptual framework; Participated in the

evaluation of the research programmes as the support of the eye-tracking and VR.

National Elite Institute of Engineering (Chongqing Univ.) (only 18 in China), Curriculum Reform Project Main duties: Led a 5-member team to develop a textbook on <Human Factors Ergonomics>; Responsible for Unity VR Development section and UX Maps section of the course; Designed course exams for 2 courses totaling 6 credits; Conducted a classroom experiment and presented 1 conference paper.

2023-Current Research on navigation optimization in the context of indoor-outdoor environmental transitions

Chongqing Postgraduate Research and Innovation Fund Project 2023

Main duties: Conducted the index modes on special aganities and pavi

Main duties: Conducted the indoor roads on spatial cognition and navigation optimization part of the study.

2022-2023 Research on mobile phone operating system aging specification

2023-Current A study of building ergonomics curriculum development

OPPO MOBILE Telecommunications Corp., Ltd co-operation project

<u>Main duties:</u> Participated in the development of mobile phone operating system aging standards, responsible for aging text and screen size specifications.

2020-2021 **Modular home smart table design**The 5th Chongqing Student Research Training Program

Project Leader

Main duties: Led a 5-member team to complete user research, sample design, development, evaluation work,

responsible for mechanical structure design, electronic control system design.

Teaching & Conferences Work

2024	<ergonomics> 2024 Spring</ergonomics>	Course Assistant
	National College of Excellence for Engineers (Chongqing Univ.)	
2023, 2024	<human &="" ergonomics="" factor=""> 2023 Autumn, 2024 Autumn</human>	Course Assistant
	College of Management Science and Real Estate (Chongqing Univ.)	
2023	Urban and Rural Human Factors Workshop	Conference Service
	College of Management Science and Real Estate (Chongqing Univ.)	
2022	The 2nd Academic Conference of the AI Interaction and UV Branch of the	Chinese Francomics Society

The 2nd Academic Conference of the Al Interaction and UX Branch of the Chinese Ergonomics Society (IIE&IWC) Conference Service Manager

Chinese Ergonomics Society (CES)

Main duties: Pecaint and dispatch of

<u>Main duties:</u> Receipt and dispatch of manuscripts, preliminary review, organization of review by members of the Academic Committee, supervision of publication

Work Experience

2020.07-08 ARTOP Group Industrial Design Co. Main duties: Joined the <Chongaing Design Co.

Industrial Design Intern

<u>Main duties</u>: Joined the <Chongqing Dazu Long Shui Enterprise Gift Design> project team as a three-person team leader, organizing the team to output design proposal

Skills Expertise:

Expertise: Statistics, User Study, Persona, Usability Evaluation and Test, Survey Study, Experiment Design, UX/UI design, Related Skills: Hardware microcontroller development (stm32, K60 et.al.), motor control, basic mechanical design, design hand drawing, application development

Applications: Unity, Keil, Photoshop, Illustrator, Blender, AutoCAD, UG, SPSS, MS office, Xd

Coding: Proficient in Matlab, Python, C (C++、 C#), R; Familiar with Batch command, HTML