#### Yifan Zhu

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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)

#### **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)

#### **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)
2019,2020	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

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

<u>Main duties</u>: Participated in researching 136 articles to construct a conceptual framework; Participated in the evaluation of the research programmes as the support of the eve-tracking and VR.

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

2023-Current A study of building ergonomics curriculum development Sub-topic Leader

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

 $\underline{\underline{Main\ duties:}}\ Conducted\ the\ indoor\ roads\ on\ spatial\ cognition\ and\ navigation\ optimization\ part\ of\ the\ study.$ 

# 2022-2023 Research on mobile phone operating system aging specification

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

Project Leader

The 5th Chongqing Student Research Training Program

<u>Main duties:</u> 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

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.)	
2023	The 2nd Academic Conference of the AI Interaction and UX Branch of the Chinese Ergonomics Society	
	(IIE&IWC)	Conference Service Manager
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Chinese Ergonomics Society (CES)

<u>Main duties:</u> Receipt and dispatch of manuscripts, preliminary review, organization of review by members of

<u>Main duties:</u> Receipt and dispatch of manuscripts, posithe Academic Committee, supervision of publication

# Work Experience

# 2020.07-08 ARTOP Group Industrial 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: 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