

# KAIXIN JI

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## RESEARCH INTEREST

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My research interests lie at the intersection of cognitive psychology and human-computer interaction, with a particular focus on leveraging wearable devices to support self-awareness and regulation of cognitive health. My thesis aims to measure users' information behaviors and cognitive bias in interactive information-seeking with multi-modal sensing. The sensing data includes neurophysiological, e.g. EEG for brain activity, Electrodermal Activity (EDA) and Blood Volume Pulse (BVP) for peripheral activity, eye-tracking data, etc.

## EDUCATION EXPERIENCES

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**Ph.D. (Data Science)** March 2022 - Sept. 2025 (est.)  
*RMIT University & ARC Centre of Excellence for Automated Decision-Making and Society (ADM+S)*  
• **Supervisors:** Damiano Spina, Falk Scholer, Danula Hettiachchi, Flora Salim (UNSW)

**Master of IT (Human-Computer Interaction)** March 2020 - July 2021  
*University of Melbourne*  
• **Main Subjects:** UX design, Usability Testing, User Study, Field Study

**Bachelor of IT (Software Development)** March 2017 - Dec. 2019  
*University of South Australia*

## SELECTED PUBLICATIONS

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- [1] SenseSeek Dataset: Multimodal Sensing to Study Information Seeking Behaviors.  
*ACM Proceedings of Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)*, 2025.  
[Kaixin Ji](#), Danula Hettiachchi, Flora Salim, Falk Scholer, Damiano Spina
- [2] GLOSS: Group of LLMs for Open-Ended Sensemaking of Passive Sensing Data for Health and Wellbeing.  
*ACM Proceedings of Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)*, 2025.  
Akshat Choube, Ha Le, Jiachen Li, [Kaixin Ji](#), Vedant Das Swain, Varun Mishra
- [3] Sensory Design with Scent: Exploring the Impact of Ambient Smell on Emotions and Physiological Responses in the Office Environment.  
*The International Journal of Building Science and its Applications (Building and Environment)*, 2025.  
Mohsen Kafaie, Mehrnoush Latifi, Jane Burry, Joseph Ciorciari, Amirhossein Aminiatabar, [Kaixin Ji](#)
- [4] Towards Detecting and Mitigating Cognitive Bias in Spoken Conversational Search.  
*ACM International Conference on Mobile Human-Computer Interaction (MobileHCI Adjunct) [Poster]*, 2024.  
[Kaixin Ji](#), Sachin Pathiyan Cherumanal, Johanne Trippas, Danula Hettiachchi, Flora Salim, Falk Scholer, Damiano Spina
- [5] Characterizing Information Seeking Processes with Multiple Physiological Signals.  
*ACM Conference on Research and Development in Information Retrieval (SIGIR)*, 2024.  
[Kaixin Ji](#), Danula Hettiachchi, Flora Salim, Falk Scholer, Damiano Spina
- [6] Walert: Putting Conversational Search Knowledge into Action by Building and Evaluating a Large Language Model-Powered Chatbot.  
*ACM Conference on Human Information Interaction and Retrieval (CHIIR) [Demo]*, 2024.  
Sachin Pathiyan Cherumanal, Lin Tian, Futoon M Abushaqra, Angel Felipe Magnossão de Paula, [Kaixin Ji](#), Halil Ali, Danula Hettiachchi, Johanne R Trippas, Falk Scholer, Damiano Spina
- [7] Inside Out or Not: Privacy Implications of Emotional Disclosure.  
*ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp Adjunct) [Poster]*, 2024.  
Elham Naghizade, [Kaixin Ji](#), Benjamin Tag, Flora Salim

- [8] 🏆 Towards Detecting Tonic Information Processing Activities with Physiological Data.  
*ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp Adjunct) [Poster], 2023.*  
Kaixin Ji, Danula Hettiachchi, Flora Salim, Falk Scholer, Damiano Spina
- [9] Examining the Impact of Uncontrolled Variables on Physiological Signals in User Studies for Information Processing Activities.  
*ACM Conference on Research and Development in Information Retrieval (SIGIR) [Short], 2023.*  
Kaixin Ji, Danula Hettiachchi, Flora Salim, Falk Scholer, Damiano Spina
- [10] Designing and Evaluating Presentation Strategies for Fact-Checked Content.  
*ACM Conference on Information and Knowledge Management (CIKM), 2023.*  
 Danula Hettiachchi, Kaixin Ji, Jenny Kennedy, Anthony McCosker, Flora D Salim, Mark Sanderson, Falk Scholer, Damiano Spina
- [11] Individual and Group-wise Classroom Seating Experience: Effects on Student Engagement in Different Courses.  
*ACM Proceedings of Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), 2022.*  
 Nan Gao, Mohammad Saiedur Rahaman, Wei Shao, Kaixin Ji, Flora Salim
- Submissions Under Review:**
- [12] Towards a Dissonance Thermometer: Understanding Neuro-physiological Responses to Attitude Conflict in Information Search.  
*ACM Proceedings of CHI Conference on Human Factors in Computing Systems (CHI), 2026.*  
Kaixin Ji, Danula Hettiachchi, Flora Salim, Falk Scholer, Damiano Spina

## AWARDS & GRANTS

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### Awards

- Gary Marsden Travel Award  
 @ *ACM SIGCHI* 2025
- Best Poster  
 @ *RMIT School of Computing Technologies Doctoral Colloquium* 2024
- Special Service Award  
 @ *ACM International Conference on Mobile Human-Computer Interaction (MobileHCI)* 2024
- Best Poster Paper  
 @ *ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp/ISWC)* 2023
- Student Challenge Award  
 @ *ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp/ISWC)* 2023
- 🏆 ZzzGPT: An Interactive GPT Approach to Enhance Sleep Quality  
 Yonchanok Khaokaew, Thuc Hanh Nguyen, Kaixin Ji, Hiruni Kegalle, Marwah Alaofi
- Runner-up (group) of Bushfire Grand Challenge Masterclass  
 @ *Commonwealth Scientific and Industrial Research Organisation (CSIRO) Data61* 2022
- International Merit Scholarship  
 @ *University of South Australia* 2019

### Grants

- The Chinese Government Award for Outstanding Self-financed Students Abroad – US\$6,000  
 @ *China Scholarship Council* 2025
- Internal HDR Funding – AU\$5,000  
 @ *ARC Centre of Excellence for Automated Decision-Making and Society (ADM+S)* 2024 & 2025
- Student Conference Travel Grant (APAC) – AU\$3,000 @ *Google* 2024
- Internal Research Funding – AU\$5,000 (experiment equipment acquisition)  
 @ *ARC Centre of Excellence for Automated Decision-Making and Society (ADM+S)* 2022

## ACADEMIC SERVICES

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### Workshop Co-Organizer

- NeuroPhysIIR'25: The International Workshop on NeuroPhysiological Approaches for Interactive Information Retrieval  
@ *ACM Proceedings of the SIGIR Conference on Human Information Interaction and Retrieval* 2025
- APhyMeHII'24: Advancing Physiological Methods for Human-Information Interaction  
@ *ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp/ISWC)* 2024

### Conference Organization Committee

- Student Volunteer Co-Chair @ *ACM SIGIR CHIIR* 2025
- Registration Chair @ *ACM MobileHCI* 2024
- Student Volunteer @ *ACM UbiComp/ISWC* 2024

### Invited Reviewer & Sub-reviewer

- ACM CHI 2024/2025/2026; ACM MobileHCI 2024; ACM SIGIR 2024/2025; ACM TOIS 2024/2025; ACM CHIIR 2025/2026; ACM WSDN 2026;

## TEACHING & PROFESSIONAL EXPERIENCE

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### Research Assistant

Oct. 2025 - Dec. 2025

UNSW

- **Project:** *AI-Driven Analysis and Simulation of Older Adult Workforce Re-engagement in Australia*

### CIDDA Usability Lab Manager

Feb. 2023 - Present

RMIT University

### Tutor/Teaching Assistant

July 2022 - Present

RMIT University

#### • Subjects:

- \* Data Mining (COSC2111): *Semester 2, 2025*
- \* Practical Data Science with Python (COSC2670): *Semester 1, 2025*
- \* Programming Fundamentals for Scientists (COSC2510): *Semester 1, 2025*
- \* Advanced Programming on Data Science (COSC2410): *Semester 2, 2023 & Semester 1, 2024*
- \* Programming Bootcamp 1 – Python (COSC2801): *Term 1, 2022*
- \* Programming Bootcamp 2 – Java (COSC2802): *Term 1, 2022*
- \* Building IT System (COSC2250): *Semester 1, 2022*

### Research Assistant

June 2022 - June 2024

RMIT University

- **Project:** *Understand the Relation between Context, Users' Emotion, and Information Disclosure Behavior*

### Software Intern

April 2019 - Nov. 2019

YourAnswer.io

- **Description:** Develop the backend of a client reporting console for product performance evaluation, then deploy on AWS.

### Intern

Dec. 2018 - Feb. 2019

Leyan Technologies

- **Description:** Build microservices, design and construct databases, and develop APIs.

### Guest Lecture

RMIT University

#### • Subjects & Talk Topics:

- \* Geospatial Programming (GEOM2157 & GEOM2159): *Tips for Complex Data Analysis with Python*
- \* Buyer Behavior (MKTG1339): *Eye-tracking for Online Buyer Behaviors*
- \* Usability Engineering (COSC1182): *Design a Lab Study for: Quantify and measure online user behaviours and attitude changes in information-seeking using sensors*

## REFERENCE

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**Dr. Damiano Spina**

PhD Senior Supervisor

Email: damiano.spina@rmit.edu.au

**Prof. Falk Scholer**

PhD Senior Supervisor

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**Dr. Danula Hettiachchi**

PhD Joint supervisor

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**Prof. Flora Salim**

PhD Joint supervisor

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