

# Yiran Wang

Beijing, China · aerynwang0611@gmail.com · +86 13190518135 · [aerynwang.com](http://aerynwang.com)

## RESEARCH INTERESTS

---

Human-Computer Interaction · Ageing Technology · Health HCI · Assistive Technology · Smart-Home Interaction · Digital Inclusion · Adaptive Usability · Interaction Breakdowns · Trust, Confidence, and Sustained Use · Caregiver-Mediated Interaction · Multimodal and Behavioral Measurement

## EDUCATION

---

**Tianjin Normal University, College of Art and Design** Sep 2020 – Jun 2024

Bachelor of Fine Arts, Visual Communication Design

GPA 3.8/4.0 · Weighted Average 89.0/100 · Ranked 1st out of 102 students · National Scholarship 2023

**Relevant coursework:** Python Programming (100/100), Introduction to Computer Science (99.7), Web Development Basics (99), Multimedia Technologies (98), Introduction to AI (97.5), Fundamentals of Computer Application (92), Database Applications (91), User Interface Design (90), Digital Design (90)

## SELECTED HCI / AGEING TECHNOLOGY PROJECTS

---

**Age-Friendly Hearing-Aid Self-Fitting — Eartech** May – Jul 2024

*UI/UX Designer · Interaction Design Research Contributor*

- Investigated age-friendly self-fitting interaction for older adults, analyzing the hearing-aid workflow as a multi-actor HCI system involving users, caregivers, audiologists, hardware, and companion mobile app.
- Examined interaction breakdowns arising from low smartphone familiarity, Bluetooth pairing, multi-step calibration, working-memory burden, feedback ambiguity, caregiver-mediated operation, and environmental noise.
- Contributed to revised interaction flows including caregiver-supported pathways, clearer task staging, and feedback prompts placed at moments of uncertainty rather than only after errors.

**Xiaomi M30 Smart Lock — Smart-Home HCI Case** May – Nov 2024

*Interaction Designer · HCI Case Analysis*

- Reframed commercial smart-lock design work as an HCI case study examining authentication reliability, trust calibration, fallback behavior, and household role distribution.
- Examined how repeated authentication failures erode trust and prompt reversion to physical alternatives, connecting product interaction decisions to ageing-HCI questions of autonomy and sustained use.

**Age-Friendly Smart-Home Field Research (Xiaomi × Tsinghua)** May – Sep 2024

*Design Research Contributor*

- Participated in field visits with 15 households and 32 participants to study older adults' awareness, acceptance, and use habits regarding smart-home technologies.
- Contributed field insights to early-stage research input for age-friendly consumer-product design guidelines and standards discussion.

**TranquilMind — Multimodal VR Interaction Prototype** 2025 – Present

*Independent Technical Exploration*

- Developed a VR interaction environment and began integrating sensor-based interaction inputs using ESP32, MAX30102 heart-rate/SpO<sub>2</sub>, and Grove GSR.
- Explored physiological and behavioral signals as exploratory complements to qualitative HCI methods in state-aware interaction research.

## PROFESSIONAL EXPERIENCE

---

**Xiaomi Corporation — Ecosystem HMI Team** May 2024 – Nov 2024

*Interaction Designer · Beijing, China*

- Co-developed soft-hardware interaction design for the Xiaomi M30 smart lock across the lock panel and companion app, covering fingerprint biometrics, PIN entry, physical-key fallback, app-based remote access, family permissions, temporary access, feedback states, and error-recovery logic.

- Coordinated with product managers, hardware engineers, software engineers, industrial designers, and UI designers to translate interaction requirements into implementable product flows.
- Contributed to the commercial launch of the Xiaomi M30 in November 2024.

### **Baidu Translate**

May 2023 – Aug 2023

*User Experience Design Intern · Beijing, China*

- Conducted user research for Baidu Translate's document translation feature, including analysis of 1,000+ online questionnaire responses and two focus-group sessions.
- Synthesized user segments and mapped document-translation workflows; identified pain points around unclear model selection, low proofreading affordance, and fragmented professional translation needs.
- Contributed to interface redesign: model-selection optimization, VIP/professional-user features, and translation annotation functions.

### **AAUPC Chavannes & Associates**

Sep 2023 – Jan 2024

*UI/UX Design Intern · Remote (China-based)*

- Designed and iterated website interfaces for architectural project presentation, supporting UI/UX strategy, layout, and visual-system development through to a launched website.

### **Independent HCI Research & Prototyping**

Jan 2025 – Present

*Beijing, China*

- Conducted independent research preparation and portfolio development focused on ageing technology, health HCI, assistive technology, and smart-home interaction.
- Reframed prior industry and design projects as research cases on older adults' digital inclusion, interaction breakdowns, trust, and sustained use.
- Continued technical prototyping involving VR interaction and physiological sensing as possible complements to qualitative HCI research.

### **AWARDS AND HONORS**

---

- National Scholarship, 2023 (national level)
- First Prize, China International College Students' Innovation Competition, 2023  
*Project: Intelligent Emotion-Companion Health Management App in the Context of AI · Role: Project Leader*
- National-Level College Students' Innovation and Entrepreneurship Training Program, 2023  
*Project: Visual Identity Design for Universities in the Context of Digital Communication · Role: Project Leader*
- Additional design awards include NCDA and provincial-level student design competition recognitions.

### **SKILLS**

---

**Research Methods:** User research, field observation, interviews, questionnaire analysis, focus groups, journey mapping, stakeholder mapping, task-flow analysis, usability analysis

**Design & Prototyping:** Interaction design, information architecture, design systems, Figma, Sketch, Adobe Photoshop / Illustrator / InDesign, Blender, TouchDesigner, Unreal Engine

**Technical:** Python, web development, database fundamentals, introductory AI, Arduino IDE, ESP32, GSR and heart-rate sensing