Jiaxin (Charleston) Wang

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EDUCATION

Duke Kunshan University (DKU) & Duke University Dual Degree Class of 2027

B.A. in Computation and Design; Digital Media Track (DKU) & B.A. in Interdisciplinary Studies (Duke)

GPA: 3.906/4.0.

IELTS: 8.0, **TOEFL**: 109.

Dean's List with Distinction: Fall 2022, Spring 2023, Fall 2025. **Dean's List**: Fall 2023.

Undergraduate Entrance Scholarship, Duke Kunshan University, 2022.

RESEARCH INTEREST

Embodied Interaction; Soma Design; Design for Wellbeing; Tangible Interaction; Accessibility; Affective Interaction.

PUBLICATION

Published

Wang, J., Wen, Y., Ye, H., He, L., Fan, M., & Tong, X. (2025).
"I Want to Use Technology to Help Farmers in the Future": Enhancing Children's Understanding of Farming through Tangible User Interfaces and Embodied Interaction.
In Proceedings of the 24th Interaction Design and Children (IDC '25). ACM. (Short paper). **(Co-first author)**.

In Preparation for Submission

Cochrane, K., Li, J., Cao, Y., **Wang, J**., Roestel, N. M. E., Vaishnapu, S. M., Leshed, G., Girouard, A., Loke, L., Ahmadpour, N.
Designing With Ourselves: A Collaborative Autobiographical Framework for Tangible Well-Being Artifacts.
Manuscript under revision (targeting TEI '27).

RESEARCH EXPERIENCE

Human-Computer Interaction Lab (HCI Lab) at DKU

Oct 2023-Jan 2025

Research Assistant to Dr. Xin Tong, Assistant Professor of Computation and Design Kunshan, China

Project: Children's Farming Educational TUI Game WuGoo

- Investigated how tangible user interfaces and embodied interaction can support children in learning farming knowledge and address limitations of traditional farming education including high cost and low engagement.
- Designed WuGoo with co-author, educational farming game integrating digital gameplay with tangible 3D-printed farming tools, translated real-world farming practices into the embodied interaction.
- Independently developed a functional prototype on Apple Watch, implemented a model based on Recurrent Neural Network (RNN) to recognize user interactions.
- Designed and conducted mixed-methods user study, finding that multisensory and tangible interactions enhanced children's farming understanding, engagement, and appreciation for farmers.
- Leading to a paper published at IDC 2025.

Embodied Computing Lab at University of Waterloo

Oct 2023-Present

Research Assistant to Dr. Karen Cochrane, Assistant Professor of Stratford School of Interaction Design and Business Remote

Project: Co-design adaptive switches with children with acquired brain injury *Oct 2023-Jan 2025*

***Project focus**: Investigates how to co-design customizable, low-cost adaptive soft switches with occupational therapists and children with acquired brain injury.*

- Collaborated with occupational therapists to understand individual children's movement skills and needs for adaptive switches, informing sensor selection and adaptive switches design.
- Designed, built, and programmed a series of adaptive switch prototypes using Arduino, supporting accessible interaction for children with acquired brain injury with diverse motor abilities.

- Iteratively refined prototypes based on occupational therapists' feedback, reflecting on trade-offs between usability, flexibility, and personalization.

Project: Collaborative Autobiographical Soma Design *March 2025-Aug 2025*

***Project focus**: Explores the Collaborative Autobiographical Framework for designing tangible artifacts for researchers' well-being through first-person design practice, a structured process that is replicable for similar work.*

- Conducted literature review on autobiographical design, soma design, and tangibles for well-being.
- Produced visualizations of diagrams based on the Collaborative Autobiographical Framework proposed by this project, visualized body maps' frequencies to support conceptual communication.
- Contributed to the related work of the paper "Designing with Ourselves: A Collaborative Autobiographical Framework for Tangible Well-Being Artifacts". (manuscript under revision, targeting TEI '27).

Project: Exploring Crochet Self-Learning with Technologies (Ongoing Project) *Dec 2025-Present*

***Project focus**: Investigates how various mediums of technology can assist embodied and movement-based crochet skill's self-learning using a first-person, research through design method.*

- Initiate and lead the project, conducted literature review on embodied interaction and hybrid crafts.
- Documenting the crochet self-learning process using various technologies, reflected on the advantages, drawbacks, and frictions of different technological mediums.
- Experimenting with training AI for crochet pattern enlargement based on crochet diagrams.
- Aiming for pictorial submission to TEI '27.

Center for The Study of Contemporary China (CSCC) at DKU Aug 2025-Feb 2026

Digital Artist, Core Member Kunshan, China

Project: Gathering the Cracks - Poetic Counter-Mapping of Informal Networks

**Recipient of the 2025 CSCC Faculty-Student Collaborative Project Grant offered by CSCC at DKU*

- Conducted 30+ hours of fieldwork in Bacheng Town in Kunshan, documenting local soundscapes, and collecting oral histories through interviews and informal conversations with residents.
- Co-created *Gathering the Cracks*, an installation art with bamboo weaving, sound, and poetry, revealing how mapping might become an act of re-connection; designed and developed a website for the project.
- Co-authored the paper "Gathering the Cracks: Poetic Counter-Mapping of Informal Networks in Bacheng" presented at the conference *Entangled Cartographies* (Track II: Networked Societies) at DKU.

PROFESSIONAL EXPERIENCE

TEA Community & Digital FUN Aug 2025-Nov 2025

Teaching Assistant, Design and New Media Art Intern Shanghai, China

- Providing teaching support for an onsite TouchDesigner courses, supporting 200+ participant interactions for 50+ hours. Contributed to curriculum development for an Arduino-based interactive art course.
- Produced and edited content on new media art for social platforms, translating complex artistic and technical concepts into accessible narratives for a broad audience.
- Iteratively designed two interactive systems for screen-based museum installations, developed user flows and interfaces by translating insights from user behavior, and client-provided narratives into design decisions.

INNOVATION & STUDENT WORKERS

Presence Lab at Duke University + DTRM Studio at DKU: Installation Art Hardware Developer.
DKU Innovation and Entrepreneurship Lab: Makers On-Site Session 1 **Best Project Award** Recipient.
HCI Lab at DKU: Website Designer and Developer.
Academic Advising at DKU: Tutor of STATS 102 (Introduction to Data Science).

TECHNICAL SKILLS

Programming: Python, Java, C, C++, SwiftUI, HTML + CSS + Java Script, Three.js.
Physical Computing: Arduino, Raspberry Pi.
Others: Blender, TouchDesigner, Photoshop, Illustrator, InDesign, Figma, Davinci Resolve, R.