

# Mengni Zhang

RA | PhD | EDAC

Assistant Professor | Department of Design Studies  
University of Wisconsin - Madison | School of Human Ecology  
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## **Education:**

### **PhD in Human Behavior and Design, August 2022**

- Department of Human Centered Design, College of Human Ecology, Cornell University, Ithaca New York.
- Minor fields of study: Information Science, Electrical & Computer Engineering
- PhD dissertation title: Augmenting Home Environments With “Sort,” An Assistive Robotic System Supporting The Domestic Organizational Routines Of Human Inhabitants.
- Dissertation advisors:
  - Dr. Keith E. Green (Chair, Department of Human Centered Design)
  - Dr. Kirstin Petersen (Department of Electrical and Computer Engineering)
  - Dr. Cindy Kao (Department of Information Science)
  - Dr. Johnell Brooks (External advisor, Clemson University)

### **Master of Design Studies, May 2013**

- Graduate School of Design, Harvard University, Cambridge Massachusetts.

### **Bachelor of Architecture, May 2010**

- College of Art, Architecture and Planning, Cornell University, Ithaca New York.

## **Professional Affiliation**

### **Licensure**

- Licensed Architect, registration: NY-043995 (2021 – Current)
- Evidence based design: EDAC certification (2022 – Current)

## **Positions held**

### **Assistant Professor**

- University of Wisconsin-Madison, School of Human Ecology, Department of Design Studies (2023 – Current)

### **Visiting Assistant Professor**

- New York Institute of Technology, Department of Architecture (2022 - 2023).

### **Paper reviewer**

- Journal of Interior Design, 2025
- ACM, Transaction on Human Computer Interaction, 2025
- MindTrek Conference, 2024
- ACM- Tangible Embedded and Embodied Interaction, pictorial track, 2022
- ACM- Designing Interactive Systems, pictorial track, 2021

## **Architectural Designer**

- HDR Inc, Architectural Designer (Healthcare), San Francisco (2014 - 2018)
- Gensler, Technical Architect, Washington DC (2010 - 2011)

## **Research Consultant**

- Zofnass Program of Sustainable Infrastructure, Harvard University (2013-2014)

## **Teaching Fellow**

- Undergraduate general education, Harvard University (Fall 2012)

## **Honors and Awards**

- School of Human Ecology Dean's CDMC Faculty Research Fellowship, UW-Madison, 2025
- Innovative Teaching Ideas Award, Interior Design Educators Council, 2024
- Madison Teaching and Learning Excellence (MTLE) fellowship for early-career faculty development, 2024
- Alumni Fellowship, Cornell University, 2022
- NSF Travel Grant, IEEE CHASE, 2021
- College of Human Ecology Fellowship, Cornell University, 2021
- Cornell Council for the Arts Biennial Grants, 2020
- Merit Award, Biomimicry Global Design Challenge, The Biomimicry Institute, 2019
- Sage Fellowship, Cornell University, 2018
- Honorable Mention (Group), UIA-PHG International Student & Young Architect Competition. "Smart, Green & Beyond: Healthcare Facility of the Future", 2017

## **Publications**

† Works completed since joining UW-Madison

[P] Peer-reviewed

1. Xu, C., **Zhang, M.**, (2026) AeroShelter: Presence as Interface: Designing for Presence-as-Input Interaction in Public Space. In Proceedings of the Twentieth International Conference on Tangible, Embedded, and Embodied Interaction (TEI '26). Association for Computing Machinery, New York, NY, USA, Article 67, 1–6. <https://doi.org/10.1145/3731459.3779327> †[P]
2. **[Best Poster Award]** Rendon, E., **Zhang, M.**, (2026) COSMITO: Cognitive Outer Space Monitor and Individual Therapeutic Outfit. In Proceedings of the Twentieth International Conference on Tangible, Embedded, and Embodied Interaction (TEI '26). Association for Computing Machinery, New York, NY, USA, Article 86, 1–9. <https://doi.org/10.1145/3731459.3779346> †[P]
3. **Zhang, M.**, Thadhani, M. (2026) "Futurism in Human Centered Interior Design Studio". in proceedings of 2026 Annual IDEC conference (Interior Design Educators Council) †[P]
4. **Zhang, M.**, Green, K.E. (2024) Smart Assistive Design Concepts for Enhancing Independent Living in Domestic Environments, Chapter in *Routledge Companion to Smart Design Thinking in Architecture & Urbanism for a Sustainable Living Planet*. DOI: 10.4324/9781003384113-31. † [P]

5. Yoon, S.Y., **Zhang, M.**, (2022) “Community-Engaged Learning and Co-Designing: Working with Local Artists for a Library Cafe” in proceedings of 2022 Annual IDEC conference (Interior Design Educators Council). [P]
6. **Zhang, M.**, K. E. Green, (2022) “Get Organized! Imagining an Assistive Wall-Climbing Multi-Robot System for Sorting and Delivering Domestic Items”, video presentation entry in *IEEE Conference on Robotics and Automation (ICRA)*. [P]
7. **Zhang, M.**, Xu, T., Hardin, J., Cai, J. J., Brooks, J. and Green K. E. (2021) "How Many Robots Do You Want? A Cross-Cultural Exploration on User Preference and Perception of an Assistive Multi-Robot System," in *30th IEEE International Conference on Robot & Human Interactive Communication (RO-MAN) 2021*, pp. 580-585, doi: 10.1109/RO-MAN50785.2021.9515396 [P]
8. **Zhang, M.**, Dewey, C., and Kalantari, S., (2020) “Dynamic Anthropometric Modeling Interface (DAMI) – A Kinect-Based Anthropometric Modeling Work Process for Patient Room Layout Optimization and Nurse Posture Evaluation, ” in *proceeding of ACADIA 2020 Distributed Proximities*, edited by B. Slocum, V. Ago, S. Doyle, A. Marcus, M. Yablonina, and M. del Campo. volume 1 p110-119. [http://papers.cumincad.org/data/works/att/acadia20\\_110.pdf](http://papers.cumincad.org/data/works/att/acadia20_110.pdf) [P]
9. **Zhang, M.**, Hardin, J., Brooks, J. and Green, K. E., (2019) “Bridging the Ambient Environment and HRI: Using Site-Specific Robots to Create Context-Conscious Interaction”, position paper in *First international workshop on Designerly HRI Knowledge*, Held in conjunction with the 29th *IEEE International Conference on Robot and Human Interactive Communication (RO-MAN)*. [P]

## **Exhibitions**

1. **Zhang, M.**, pending upcoming solo exhibit at Tiat Space, 2026-2027
2. **Zhang, M.**, “Rustling Veil” at UW-Madison Ruth Davis Design Gallery as part of the show *Find Your Quilts*. Oct 2025 – March 2026.
3. **Zhang, M.**, Li, R., “In-Touch: A tactile language encoder”, exhibited in *SWARM: Ecology, Digitality, Sociality. Cornell Council for the Arts, Biennial 2020*. <https://cca.cornell.edu/portfolio/mengni-zhang-2020-cornell-biennial/> [P]
4. **Zhang, M.**, Li, R., Song, Z., “The Foolish Oldman Project”, exhibited in *Urbanism\Architecture Bi-City Biennale (UABB) of Shenzhen and HongKong*, 2019. [P]

## **Professional projects**

Note: all professional projects were completed in groups

### **Chongqing Ourui Hospital (HDR Inc)**

- Expansion (1000 beds, 1.6 Million sqft), Chongqing China, 2017.
- Concept design developments.

### **Intermountain Spanish Fork Hospital (HDR Inc)**

- New Construction, Spanish Fork Utah, 2017.
- Life safety analysis.
- Assisted in schematic set.
- Served as local project BIM manager.

### **EverBright Hainan Medical Center (HDR Inc)**

- Concept Master Plan, Hainan China, 2017.
- Assisted in master plan concept proposal.

**Intermountain Dixie Regional Medical Center (HDR Inc)**

- Expansion & Renovation (320,000 sqft), St. George Utah, 2016-2017.
- Assisted across all project phases.
- Assisted in construction administration.
- Served as local project BIM manager.

**Gilead B353 VP Office (HDR Inc)**

- TI renovation, Foster City CA, 2016.
- Interior rendering.

**Al Khor Hospital (HDR Inc)**

- New Construction, Qatar, 2016.
- Assisted in preliminary building solar study.

**Kaiser Permanente RAD (HDR Inc)**

- Corporate level concept typology design, 2016.
- Assisted in concept design proposals.

**Stanford SLAC Photon Science Laboratory Building (HDR Inc)**

- New Construction, Palo Alto CA, 2015.
- Assisted in schematic design.

**Glory Shantou University Hospital (HDR Inc)**

- New Construction (2000 beds), Shantou China, 2015.
- Design and assisted in concept design competition.

**Health Right 360 Clinic (HDR Inc)**

- Adaptive Re-use, San Francisco CA, 2015.
- Coordination and design of building interior.

**Umm Al Qura Medical Campus (HDR Inc)**

- Campus expansion, Saudi Arabia, 2014.
- Design of exterior courtyard and parametric skin.

**ZheJiang University Medical Campus (HDR Inc)**

- New Construction (2000 beds 3.2 Million sqft), Zhejiang China, 2014.
- Assistant lead designer in building exterior and interior for the schematic design phase.

**UCSF Benioff Children's Hospital of Oakland (HDR Inc)**

- Renovation & Expansion, Oakland CA, 2014.
- Coordination on Central Utility Plant design.

**Invited talks**

New York University, "Interaction Design Roundtable", NYU IDM (2022)

**Massachusetts Institute of Technology**, “Augmenting Ambient Environments with Assistive Robots to Improve Life Quality and Understand Human-Environment Relations”, MIT CSAIL HCI Engineering Group (2021)

## **Teaching**

### **Fall 2025**

- DS622: Interior Design III
- DS223: Interior Architectural Design

### **Spring 2025**

- DS549: Environmental Control Systems
- DS501: [Re]Generative Design (Special topics)

### **Fall 2024**

- DS622: Interior Design III
  - Overall Score: 3.47    Dept. Overall Score: 4.38  
Instructor Score: 3.79    Dept. Instructor Score: 4.48  
Course Score: 3.23    Dept. Course Score: 4.3
- DS223: Interior Architectural Design
  - Overall Score: 4.26    Dept. Overall Score: 4.38  
Instructor Score: 4.31    Dept. Instructor Score: 4.48  
Course Score: 4.23    Dept. Course Score: 4.3

### **Spring 2024**

- DS549: Environmental Control Systems
  - Overall Score: 4.90    Dept. Overall Score: 4.51  
Instructor Score: 4.94    Dept. Instructor Score: 4.63  
Course Score: 4.87    Dept. Course Score: 4.42
- Guest lecturer: DS 679 Research methods in design

### **Fall 2023**

- DS622: Interior Design III
  - Overall Score: 4.46    Dept. Overall Score: 4.54  
Instructor Score: 4.74    Dept. Instructor Score: 4.64  
Course Score: 4.25    Dept. Course Score: 4.46
- DS223: Interior Architectural Design
  - Overall Score: 4.60    Dept. Overall Score: 4.54  
Instructor Score: 4.65    Dept. Instructor Score: 4.64  
Course Score: 4.57    Dept. Course Score: 4.46

## **Teaching achievements**

### **Chipstone Foundation Summer Fellowship 2026**

- Advised undergraduate student Edward Xiong on CDMC Chipstone fellowship.

### **IIDA Student Competition 2026**

- Advised undergraduate student Anastasiya Kurova, won IIDA Wisconsin chapter competition, honorable mention.

### **La Biennale Di Venezia 2023**

- 18. mostra internazionale di architettura, co-advised student group exhibition entry at the collateral event of the 2023 Venice Biennale. “Mismeasured”, advising faculty: Christian Pongratz, Athina Papadopoulou, Mengni Zhang.

[https://www.nyit.edu/events/students\\_as\\_researchers\\_creative\\_practice\\_and\\_university\\_education](https://www.nyit.edu/events/students_as_researchers_creative_practice_and_university_education)

### **IDEC (Interior Design Educators Council) 2022 Student Design Competition**

- Co-advised student group from DEA 3301 won first place in North East region and Honorable Mention at national level (Instructor of record: So-Yeon Yoon).
- Co-advised student group from DEA 3301 won second place in North East region, <https://idec.org/2022-2/> (Instructor of record: So-Yeon Yoon).

### **IIDA 2022 Student Design Competition**

- Co-advised student group from DEA 3301 won third place (Instructor of record: So-Yeon Yoon).
- <https://iida.org/competition/2022-student-design-competition>

### **Advising**

- **Ely Rendon** (PhD student, School of Human Ecology, UW-Madison)  
Dissertation topic: COSMITO: leveraging human-plant interaction to support astronauts in confined spaces during long space missions.
- **Bonbon Yang** (PhD student, School of Human Ecology, UW-Madison)  
Dissertation topic: Designing interactive wearable systems to support learning and diving instruction.
- **Melody Pak** (PhD student, School of Human Ecology, UW-Madison)  
Dissertation topic: ViWIN: developing and testing a Revit plug-in to for evaluating views during architectural design.
- **Curtis Xu** (PhD student, School of Human Ecology, UW-Madison)  
Dissertation topic: PAI: presence as input, a new no-UI interaction design paradigm to promote human-environment relation.
- **Youngsoo Takei** (PhD student, School of Human Ecology, UW-Madison)  
Dissertation topic: Using computational textile for cultural story-telling.

### **Media Coverage**

- Radio Chipstone, 2026

### **Academic Services**

#### **Search committee**

- Speaker and event coordination (Oct 2023 – Current)
- Member, Digital fabrication lab manager search: Appointed (October 2023 - November 2023)
- Member, Interior Architecture lecturer search, Appointed (August 2023 – October 2023)
- Member, Tenured track Assistant or Associate professor of Design Studies, Appointed (February 2024 – April 2024)

#### **Faculty Senate**

- Alternate member: Appointed (October 2023 - Present)