

EDUCATION

Ithaca, NY Aug 2026 – May 2028	Cornell University M.S. Design Technology (Studio Professional Track) – Merit tuition scholarship, awarded to top admitted applicants – Coursework: Coding for Design · Design and Making · Design for Physical Interaction · AI Design & Creativity
Hangzhou, China Sep 2021 – Jul 2026	Zhejiang University Bachelor of Architecture, Minor in Philosophy · GPA 3.85 (last three years 3.93)
Munich, Germany Apr – Aug 2025	Technical University of Munich Exchange, Chair of Architectural Informatics

SELECTED PROJECTS

Summer 2025	BEI – AI Rental Assistant AI agent UX/UI · Personal project Figma · User research · Usability testing · AI-assisted prototyping – Designed end-to-end UX/UI for an AI agent that helps remote workers find housing that fits their lifestyle – Ran 7 user interviews and analyzed 25 social posts; usability-tested low-fi prototypes, surfacing friction around prompts, AI trust and privacy – Replaced open-ended prompts with guided onboarding and made scoring transparent with radar-chart comparisons and cited sources
Spring 2025	ColorMapper – Tangible Design Tool Tangible UI · Personal project OpenCV · C++ · Physical prototyping · Digital twin – Built a projection-mapped interface that lets architects lay out space with physical blocks while OpenCV (C++) tracks them, projects live feedback and calculates area metrics on a digital twin – Prototyped two approaches (magnetic LED modules, then color-coded sheets) and shipped the simpler one, cutting hardware complexity and fixing perspective distortion

EXPERIENCE

Ithaca, NY Oct 2026 – Present	Research Assistant – Architected Matter Group, Cornell PI: Prof. Amira Abdel-Rahman – Developing a proposal on inverse and generative design
Hangzhou, China Mar 2023 – Jul 2025	Project Leader – Student Research Training Program, Zhejiang University Computational urban design · Spatial data science – Led a student research team from problem definition to publication, extending the standard 2D street-orientation entropy metric to 3D by adding terrain elevation for hilly cities – Built the analysis pipeline in Python and ArcGIS; benchmarked 10 Chinese cities and 9 Chongqing districts and tested results against a resident perception survey (n = 104) – Results: first-author journal paper (<i>Buildings</i>, Editor's Choice) and a poster at ISAIA 2024, Kyoto
Hangzhou, China Sep – Dec 2025	Architectural Intern – Architectural Design & Research Institute of ZJU Selected project: Jinghu National Urban Wetland Park, Phase 1 – Worked with the project architects on design development, producing drawings, 3D models and presentation layouts in AutoCAD, SketchUp, Photoshop and InDesign

PUBLICATIONS & PRESENTATIONS

Rao, H., Chen, L., Liu, C.* (2025). Quantifying Three-Dimensional Street Network Orientation Entropy in Chongqing, China: Implications for Urban Spatial Order and Environmental Perception. *Buildings*, 15(14), 2460. Editor's Choice.

Rao, H.*, Chen, L., Wang, C. (2024). A Method for Urban Design Evaluation Based on Three-Dimensional Street Orientation Entropy. Poster, 14th International Symposium on Architectural Interchanges in Asia (ISAIA), Kyoto. *Corresponding author

SKILLS

Design	UX/UI design · Interaction design · Tangible interfaces · Service design · Rapid prototyping · Graphic design
Research & data	User interviews · Usability testing · Surveys · Data analysis · Data visualization
Code & hardware	Python · C++ · OpenCV · Arduino · ArcGIS
Tools	Figma · Adobe (Photoshop, Illustrator, InDesign) · Rhino/Grasshopper · Blender · Unity · AutoCAD · SketchUp
Languages	Chinese (native) · English (fluent)