

Zihe Huang

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EDUCATION

Carnegie Mellon University

Expected May 2029 | Pittsburgh, PA

Bachelor of Architecture, Additional Major in Human-Computer Interaction (Pursuing)

- GPA: 3.88
- Selected for X-CHANGE 2025 and 2026, Carnegie Mellon Architecture's annual exhibition and publication of distinguished work

WORK EXPERIENCE

Sankofa Bamboo Greenhouse *Project Designer*

Jun 2026 – Present | Pittsburgh, PA

- Contributed to wind and gravity testing with Intertek and zoning and permitting with the City of Pittsburgh, supporting the project's transition from research prototype to full-scale construction in Homewood, Pittsburgh
- Conducted user interviews with Homewood community members and translated feedback into design iterations through weekly reviews, updating interior layout, furniture design, and environmental strategies accordingly
- Designed 10+ original joinery details in collaboration with structural engineer John M. Schneider, P.E. to improve structural performance
- Presented the project to USDA staff as part of securing a \$4,000 annual award through the Urban Agriculture and Innovative Production Grants program, with eligibility for an additional \$8,000 implementation award in 2027

Hong Kong Huayi Design Consultants (S.Z.) Ltd. *Design Intern*

Dec 2023 – Jan 2024 | Shenzhen, China

- Partnered with the Director of Design to evaluate generative AI use cases in architectural visualization and identify opportunities to streamline client-facing workflows
- Prototyped 10+ LoRA models through 600+ render iterations using Stable Diffusion, incorporating design-team feedback to develop a repeatable hand-sketch-to-render workflow as an alternative to conventional rendering across key project milestones

LEADERSHIP & RESEARCH EXPERIENCE

Carnegie Mellon University *Teaching Assistant*

Aug 2026 – Present | Pittsburgh, PA

- Led a 14-student project team by organizing students into CNC routing, 3D printing, metal preparation, joinery fabrication, and assembly teams, assigning responsibilities and coordinating work across groups
- Supervised fabrication and assembly, reviewing work quality, resolving technical issues, and enforcing safe tool operation

CMU Summer Undergraduate Research Apprenticeship (SURA) *Research Assistant*

May 2026 – Aug 2026 | Pittsburgh, PA

- Investigated Southeast Asian architectural precedents and traditional bamboo construction techniques, translating findings into joinery systems through hand sketches, technical drawings, and physical prototypes
- Designed and fabricated iterative bamboo joinery prototypes at increasing scales using hand tools, including chisels and KAKURI NATA knives, and tested prototypes under loads ranging from 100 to 5,000 pounds

SELECTED PROJECTS

TERRAVIVA *Call of the Sea*

2026 | Torosiaje, Indonesia

- Defined a tourism-driven development strategy for Torosiaje Floating Village, balancing economic growth, visitor experience, and preservation of traditional Bajau lifestyles

AIA COTE® Ten *Foundational Level*

2025 | Portland, OR

- Developed a redevelopment strategy for a post-industrial site in Portland with Prof. Jongwan Kwon, evaluating water, energy, ecology, and resilience as interconnected criteria to guide design decisions

SKILLS

Design: Adobe Illustrator, Photoshop, InDesign, Figma, Canva

Programming: Python, HTML/CSS/JavaScript

Modeling & CAD: Rhino 3D, Revit, AutoCAD, 3ds Max, Grasshopper