

EDUCATION

University of California, Berkeley, USA

Master of Architecture

Aug. 2021 - present

Graduate Certificate in New Media

- Highlight Course: Robotic Fabrication and Construction, Interaction Design, Agile Engineering Practice
Principles and Techniques of Data Science, Research Design and Application
for Data and Analysis, Theory and Practice of Tangible User Interfaces

National Taiwan University (NTU), Taiwan

Sep. 2015 - Jun. 2020

Bachelor of Science in Civil Engineering

2018, 2019

Best All-Round Student Award, Department of Civil Engineering, NTU

- Highlight Course: Shape Aesthetics and Design, Design and Construction of Wood Structures (I),
Physical Model Design Laboratory, Stage Craft (I), Color Scheme,
Keystone Challenge, Capstone Challenge

Sep. 2015 - Jun. 2020

Architectural Engineering Program

- Highlight Course: Building Environment Control, Human Environment Relations,
Behavior and System of Architectural Structure

Bauhaus-Universität Weimar, Germany

Sep. 2019 - Mar. 2020

Exchange Student

Full Scholarship

Government Scholarship for Studying Abroad, Ministry of Education Taiwan

Scholarship for Studying Abroad, Department of Civil Engineering, NTU

- Highlight Course: Digital Cultures: An Introduction for the Digital Professions

WORK EXPERIENCE

Mu. Studio

Jul. 2022 - Aug. 2022

Research Intern

- Design for glueless fabrication / installation and resistance to fire
- Use computational methods to investigate geometric arrangements for which slab elements can be created which have a lower impact on environment (adhesive-free), have less capital-intensive manufacturing processes, and which are inherently resilient against runaway burning in the event of fire

NCREE - NTUCE Joint Artificial Intelligence Research Center

Jul. 2019 - Aug. 2019

Summer Intern Program

- Use parametric modeling to generate different geometric patterns
- Learn Molecular Dynamics (MD) simulation methods
- Predict properties and performance of composite materials

Envision Engineering Consultants (EEC)

Jul. 2018 - Aug. 2018

Structural Intern

- Structural Design & Simulation
- Communicate with architectural firms
- Create presentation drawings and materials
- Cost Estimating
- Review structural design drawings

KRIS YAO | ARTECH

Jul. 2017 - Apr. 2018

Architectural Intern

- Design Development: 3D computer modeling, physical model making
- Review design drawings and construction drawings
- Meeting with engineering consultants, contractors and clients

Wooden Structure Design - Teaching Assistant

May. 2020 - Jun. 2020

Redesign and Reconstruction of Existing Wooden Pavilion

- Communications between students, teachers, and construction contractors
- Teach students how to do woodwork, metalwork, and the production of glulam beams

Keystone Challenge & Joint Workshop - Teaching Assistant	Coordinate communications and execution
<i>Interactive Light & Sound Installation (New Media Art + Architecture + Engineering)</i>	Feb. 2019 - Mar. 2019
<i>Floating Structure Under Extreme Weather Conditions (Architecture + Engineering)</i>	May. 2019 - Jun. 2019,
• Design Development and Structural Analysis Assistance	Jun. 2020
• Communications between different fields of students, teachers and local residents	
Fundamentals of Architectural Design - Teaching Assistant	Apr. 2019 - Jun. 2019
• Design Development Assistance & Woodwork Tutor of 1:1 wooden chair project	

WORKSHOPS & ACADEMIC ACTIVITIES

2022 Robotic Rod Bending Workshop	Aug. 2022
<i>Department of Architecture, National Cheng Kung University (NCKU)</i>	
• Discrete Design and Robotic Fabrication	
2022 ABM DigitalFUTURES Workshop	Jun. 2022
<i>Institute for Computational Design and Construction (ICD), University of Stuttgart</i>	
• Use Agent Based Modeling to design an Inflatable Interactive Structure	
The Future of Construction Symposium + Workshops & Tours, ETH Zürich	Jun. 2022
• Symposiums on Construction Robotics and Computational Design for Sustainable Construction	
2021 Fall Ancient Future Technology, MIT Media Lab	Sep. 2021 - Dec. 2021
• Global Listener	
2021 Shape Machine Workshop	Jan. 2021
<i>Graduate Institute of Architecture, National Chiao Tung University</i>	
• Shape Grammar & Shape Machine	
2020/2022 Sinking Legacy Workshop	Jul. 2020 - Aug. 2020
<i>Department of Architecture, Tamkang University</i>	Jul. 2022 - Aug. 2022
• Form-Finding & Fabrication; Robotic & AR Timber Fabrication; Digital design & Optimization	
Form-Finding Workshop	Feb. 2020
<i>Structural Design and Special Structures, Delft University of Technology (TU Delft)</i>	
• Exploration on digital and physical form-finding models	
2019 Student Summer Seminar	Jul. 2019
<i>Architectural Institute of Japan, Tokyo</i>	
• Structural Art of Accumulation or Transformation - ASDO Awards	
Structural Design Workshop	Apr. 2018, Apr. 2019
<i>Department of Architecture, National Cheng Kung University (NCKU)</i>	
• Designer and team leader of a structure art that can be easily carried, assembled and demolished with the concept of accumulation / transformation	
2018 Tsinghua Architecture and Culture Seminar	Jul. 2018
<i>School of Architecture, Tsinghua University, Beijing</i>	
• Learn the history and theory of architecture and urban designs in Beijing	
NTUST - Chulalongkorn University Joint Architecture Design Studio	May. 2018
<i>Department of Architecture, National Taiwan University of Science and Technology</i>	
• Tutor of Behavior and System of Architectural Structure	
Unidentified Funicular Objects	Jul. 2017
<i>Block Research Group, ETH Zürich</i>	
• Learn digital and physical form-finding methods, fabrication skills	
• Collaborate on a large scale structural art with engineers, architects and artists	

SKILLS

Manufacturing
• Metalwork, Woodwork, Robotic Fabrication, OMAX Waterjet Cutting, Structural Modeling, Architectural Modeling, Laser Cutting, 3D Printing, CNC, Zund, Composite Material
Digital Tools
• Rhinoceros 3D, Grasshopper, KUKA prc, ETABS, Karamba3D, AutoCAD, Blender, Fusion 360, Houdini, Vray Photoshop, Illustrator, Lightroom, InDesign, Figma Java, Python, Pandas, Arduino, Processing, P5.js, HTML, CSS

OTHER ACTIVITIES

Bioprinting@Berkeley	2023
Cal Origami	2022
NTU Civil Engineering Buddy Program	2018, 2020
NTU Civil Engineering Student Association	2017 - 2018
<i>Vice President, Department Journal Co-editor</i>	
Photographer	
NTU Japanese Language and Literature	
Annual / Graduation Performance	2017, 2018
NTU Art Festival	2018
NTU College of Bio-Resources & Agriculture Prom	2016