

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

Bachelor of Science in Civil Engineering

Sep. 2015 - Jun. 2020

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

2018, 2019

- 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

Architectural Engineering Program

Sep. 2015 - Jun. 2020

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

Bauhaus-Universität Weimar, Germany

Exchange Student

Sep. 2019 - Mar. 2020

Government Scholarship for Studying Abroad, Ministry of Education Taiwan

Full Scholarship

Scholarship for Studying Abroad, Department of Civil Engineering, NTU

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

WORK EXPERIENCE

Mu. Studio

Research Intern

Jul. 2022 - Aug. 2022

- 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

Summer Intern Program

Jul. 2019 - Aug. 2019

- 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)

Structural Intern

Jul. 2018 - Aug. 2018

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

KRIS YAO | ARTECH

Architectural Intern

Jul. 2017 - Apr. 2018

- 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

Redesign and Reconstruction of Existing Wooden Pavilion

May. 2020 - Jun. 2020

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

Keystone Challenge & Joint Workshop - Teaching Assistant

Interactive Light & Sound Installation (New Media Art + Architecture + Engineering)

Feb. 2019 - Mar. 2019

Floating Structure Under Extreme Weather Conditions (Architecture + Engineering)

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

Department of Architecture, National Cheng Kung University (NCKU)

- Discrete Design and Robotic Fabrication

2022 ABM DigitalFUTURES Workshop

Jun. 2022

Institute for Computational Design and Construction (ICD), University of Stuttgart

- 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

Graduate Institute of Architecture, National Chiao Tung University

- Shape Grammar & Shape Machine

2020/2022 Sinking Legacy Workshop

Jul. 2020 - Aug. 2020

Department of Architecture, Tamkang University

Jul. 2022 - Aug. 2022

- Form-Finding & Fabrication; Robotic & AR Timber Fabrication; Digital design & Optimization

Form-Finding Workshop

Feb. 2020

Structural Design and Special Structures, Delft University of Technology (TU Delft)

- Exploration on digital and physical form-finding models

2019 Student Summer Seminar

Jul. 2019

Architectural Institute of Japan, Tokyo

- Structural Art of Accumulation or Transformation - ASDO Awards

Structural Design Workshop

Apr. 2018, Apr. 2019

Department of Architecture, National Cheng Kung University (NCKU)

- 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

School of Architecture, Tsinghua University, Beijing

- Learn the history and theory of architecture and urban designs in Beijing

NTUST - Chulalongkorn University Joint Architecture Design Studio

May. 2018

Department of Architecture, National Taiwan University of Science and Technology

- Tutor of Behavior and System of Architectural Structure

Unidentified Funicular Objects

Jul. 2017

Block Research Group, ETH Zürich

- 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

Vice President, Department Journal Co-editor

Photographer

NTU Japanese Language and Literature

Annual / Graduation Performance

2017, 2018

NTU Art Festival

2018

NTU College of Bio-Resources & Agriculture Prom

2016