Jeremy Chen

Phone: +1 510-710-8895
Email: jcmchen@berkeley.edu
Website: jcmchen.com

EDUCATION

University of California, Berkeley, USA

Master of Architecture   **Aug. 2021 - present**

Graduate Certificate in New Media, Graduate Certificate in Applied Data Science

• 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, Daylighting in Architecture

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

City Science Lab @ Taipei Tech   **Jul. 2023 - Aug. 2023**

UROP Intern

• Lost Item Retrieval Using Swarm Intelligence

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; Review structural design drawings
• Communicate with architectural firms
• Create presentation drawings and materials, Cost Estimating

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
• 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

2022/2023 ABM DigitalFUTURES Workshop

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

Department of Architecture, Tongji University
  • Experiments in Agent-Based Collective Robotic Construction **Jun. 2023**
  • Use Agent Based Modeling to design an Inflatable Interactive Structure **Jun. 2022**

2022 Robotic Rod Bending Workshop **Aug. 2022**

Department of Architecture, National Cheng Kung University (NCKU)
  • Discrete Design and Robotic Fabrication

The Future of Construction Symposium + Workshops & Tours, ETH Zürich **Jun. 2022**
  • Symposiums on Construction Robotics and Computational Design for Sustainable Construction

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 / 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

2018 Tsinghua Architecture and Culture Seminar **Jul. 2018**

School of Archicture, 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
  • Collaborate on a large scale form-finding 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, Climate Studio, AutoCAD, Blender, Fusion 360, Vray, Photogrammetry | Photoshop, Illustrator, Lightroom, Premiere Pro, InDesign, Figma | Java, Python, Pandas, Arduino, Processing, P5.js

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 Performance	**2017, 2018**
Graduation Performance	**2018**
NTU Art Festival	**2016**
	2016