PENG CHENG

Education

Cornell University

Ithaca, NY

Master of Science in Design Technology, AAP

Aug 2024 - May 2026

• GPA: 3.85

University of Manchester

Manchester, UK

Bachelor of Arts (Hons) in Architecture, RIBA Part I

Sep 2020 – Jun 2024

• Focus: Sustainable Design, Adaptive Reuse, Digital Fabrication

Professional Experience

Medical Architecture Design and Research First Institute

Beijing, China

Assistant Architect, China IPPR International Engineering Co., Ltd.

Jun 2021 – Jun 2022

- Prepared bidding packages including technical specifications, concept proposals, and cost estimates for 7 healthcare projects across China.
- Analyzed site conditions, regulations, and precedent studies to inform design development for projects ranging from 5,000 to 50,000 sqm.
- Produced architectural visualizations and construction drawings using Rhino, AutoCAD, and V-ray for client presentations.
- Collaborated with interdisciplinary teams to integrate medical equipment requirements, circulation patterns, and safety protocols.

Design Projects

AI-Enhanced Educational Toy Development

New York, NY

Team Lead, Product Designer

Feb 2025

- Co-designed an AI-driven educational toy assisting K-12 teachers in developing customized collaborative activities through audio and motion interactions.
- Led the concept development, design strategy, 3D modeling, and visualization based on the "Pass It" toy concept.
- Integrated AI text analysis to generate dynamic learning activities enhancing children's cooperation and learning engagement.

Milstein Art + Tech Exhibition Winner

Ithaca, NY

First Prize, Graduate Category

Aug 2024

- Awarded first prize at Cornell's inaugural Milstein Art + Tech exhibition for an interdisciplinary project combining physical computing and digital media.
- Designed and implemented a hybrid installation integrating a one-dimensional browser game with a custom-built tangible interface.
- ullet Led system design and rapid prototyping using Arduino, sensor modules, and 3D-printed physical components.
- Programmed interactive logic and device communication to synchronize gameplay with real-time physical responses.

Kingdom Life Community Hub Renovation

Manchester, UK

Project Designer

May 2023

- Designed an adaptive reuse strategy to convert a children's center into a multifunctional community hub for diverse age
 groups.
- \bullet Incorporated sustainable materials and flexible layouts to address evolving community needs.
- Developed detailed floor plans, sections, and 3D visualizations to present design concepts.

The Tetley Gallery Revitalization

Leeds, UK

Project Designer

May 2021

- Researched historical and cultural contexts to inform sensitive design interventions.
- Proposed spatial strategies to enhance visitor experience and improve accessibility.
- Presented design concepts through physical models, digital renderings, and hand sketches.

Technical Skills

- 3D Modeling & Digital Fabrication: Rhino, Grasshopper, SketchUp, Blender, Rendering, Robotic Fabrication
- AI & Interaction: AI-driven Design, Prototyping, Interaction Concepts
- Software Tools: Adobe Creative Suite, Illustration, Sketch, HTML/CSS

Interests