# 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.

2021 - 2022

- Prepared bidding packages with technical specs, concept proposals, and cost estimates for 7 healthcare projects in China.
- Conducted comprehensive site evaluations and regulatory code analysis across 5+ provinces, informing early-stage planning, zoning compliance, and design strategies for scalable healthcare facilities ranging from 5,000 to 50,000 sqm.
- Created architectural visualizations and drawings using Rhino, AutoCAD, and V-ray for client presentations.
- Coordinated with interdisciplinary teams to integrate equipment needs, circulation, and safety protocols.

#### Kingdom Life Community Hub Renovation

Manchester, UK

Project Designer

May 2023

- Renovated a 1,500 sqm church into a multifunctional hub supporting diverse age groups and outreach programs.
- Used sustainable materials and flexible layouts across 7+ zones to support 10+ community activities and evolving needs.
- Developed detailed floor plans, sections, and 3D visualizations to present design concepts.

#### The Tetley Gallery Revitalization

Leeds, UK

Project Designer

May 2021

- Reconfigured circulation and proposed zoning changes in a 2,000+ sqft heritage gallery to improve visitor clarity and flow.
- Proposed spatial strategies to enhance visitor experience and improve accessibility.
- Presented design concepts through physical models, digital renderings, and hand sketches.

# **Design Projects**

### **AI-Enhanced Educational Toy Development**

New York, NY

Team Lead, Product Designer

Feb 2025

- Co-designed an AI-driven educational toy helping K-12 teachers develop collaborative activities via audio and motion.
- Led the concept development, design strategy, 3D modeling, and visualization based on the "Pass It" toy concept.
- Developed an AI-based system that applied text analysis to transform classroom content into 10+ dynamic interaction modules, enhancing collaborative learning and engagement among children.

#### Milstein Art + Tech Exhibition Winner

Ithaca, NY

First Prize (the Art + Tech Jury Prize), Graduate Category

Aug 2024

- Led system design and rapid prototyping using Arduino, sensor modules, and 3D-printed physical components.
- Programmed real-time logic to sync device responses with browser-based gameplay.

### 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