

Yuxiang Cheng

Full Stack Product Design Engineer, HCI Researcher

<https://www.yuxiang.design>

Education

Harvard University Graduate School of Design

Master in Design Studies, Mediums

Cross Registration at MIT (Media Lab, Architecture, and EECS)

Coursework: Computational Design & Fabrication, Transformable Materials, Spatial Computing, Robotics

University of Pennsylvania School of Engineering and Applied Sciences

Master of Computer and Information Technology

Coursework: Full-Stack Web, Database, Mobile, Internet of Things, Computer Vision, Cloud Computing

New York University Tisch School of the Arts & College of Arts and Sciences

BFA in Interactive Media Arts and Comparative Literature

GPA: 3.948/4.000, *summa cum laude*

Capstone: *AimBot: Integrating Assistive and Informative Haptics through Field-Oriented Controlled (FOC) Motor Force Dynamics*

Coursework: Interaction Design, Assistive Technology, UI/UX, Full-Stack Web, Data Visualization, XR, Media Theory

Academic Experience

MIT Media Lab — Research Assistant

Nov 2025 - Present

MIT Media Lab — Teaching Assistant

Sep 2025 - Present

- Develop course materials and workshops for MAS.S60

Cambridge, Academic

Project Mjolnir @ NYU — Researcher

Feb 2024 - Present

Open-source adaptive mountain bike for wheelchair users

New York, Research

- Engineer telemetry sensor network for biomechanical data acquisition and user behavior modeling
- Develop project website at projectmjolnir.com, managing open-source documentation and design files

NYU ITP/IMA — Fabrication Shop Staff

Sep 2021 - Dec 2024

- Managed machines and parts; advise students on fabrication projects

New York, Academic

Entrepreneurial Experience

Vortex — Co-founder, Product & Design Lead

Jun 2025 - Present

AI-coordinated chatrooms for matching strangers and connecting friends

Hybrid, Startup

- Design and develop a multimodal LLM agent

Chat ITP — Founding Project Manager & Designer

Mar 2024 - May 2025

Interaction-centered LLM workspace built by and for creatives

New York, Startup

- Managed a team of 7, plan and set goals for Dev and Design Team
- Proposed and led the design of the Workspace UI

Professional Experience

Pilat Studio (with Agnieszka Pilat) — Design/Engineering Assistant

Jul 2023 - Present

- Design technical solutions for exhibitions that saw over a million visitors
- Design and integrate sensor-actuator payloads in collaboration with Boston Dynamics
- Create conceptual films and document studio practices

New York, Part-time

Chunmi Technology — Product Designer, Smart Home

Jun 2025 - Aug 2025

- Designed Xiaomi AIoT Home products under the Industrial Design and UI Team
- Integrated software and hardware experience with concepts and methods from HCI research
- Conducted concept development of products with applications of robotics & AI

Shanghai, Internship

Award & Fellowship

OHCA 2025 Student Fellow, Open Hardware Creators in Academia program, Open Source Hardware Association (OSHWa).

1st Place in Research Exhibit, Tandon Research Excellence Exhibit, NYU Tandon School of Engineering.

Academic Service & Activity

Panelist, “*Techne and Human Sciences in the 21st Century*,” International Consortium for Critical Theory Winter Institute 2025, hosted by the University of Tokyo, Tokyo, Japan. (co-organized by New York University, University of Tokyo, Australian National University, and University of Bonn)

Student Volunteer, ACM User Interface Software and Technology (UIST) Symposium 2024, Pittsburgh, PA.

Show & Exhibition

2024

See Spot Paint, by Agnieszka Pilat, Installation at Incheon Airport, Seoul, South Korea.

Heterobota: The Language of Tomorrow, by Agnieszka Pilat, MFA Late Nite at Museum of Fine Arts Boston, Boston, MA.

Heterobota, by Agnieszka Pilat, National Gallery of Victoria (NGV) Triennial, Melbourne, Australia.

De Orbitis Planetarum, by **Yuxiang Cheng** and Long Long, Timeless by Dundun X The Canvas 3.0, New York, NY.

Training and Certification

Product Design Intensive Course, Royal College of Art (w/Bahbak Hashemi-Nezhad). August 2020.

Pre-College Summer Residential Immersive, Rhode Island School of Design. July 2019.

Skills and Tech Stack

Design: Figma, Adobe Suite, Data Visualization, GIS, StableDiffusion, Runway, ComfyUI

Media Art: Unity, MaxMSP, TouchDesigner, MadMapper, OBS, Modul8, Vezér

Imaging: Cinematography, Digital/Analog Photography

Music: Ableton, Logic Pro, Reaper, Adobe Audition

Electronics: ARM Cortex-M and RISC-V (ESP32, STM32), FreeRTOS

EDA: Eagle, EasyEDA, AltiumDesigner

CAD/CAM: Fusion360, Rhino, Grasshopper, SolidWorks, UG/NX, CREO

Subtractive/Additive: CNC, Laser-cutting, Vinyl-cutting, FDM, SLA, Polyjet, SLS

Web: MERN (MongoDB, Express, React, Node.js), MySQL, PostgreSQL, p5.js, Three.js

AI/ML: PyTorch, YOLO, MediaPipe, EdgeImpulse, TinyML

Machine Language: C/C++, Python, Swift, JavaScript, TypeScript, PHP

Natural Language: English, Mandarin, French

Last Updated 2025.11.11