

CHANG, HUNG-CHUN

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Education

National Taiwan University
M.Sc. Psychology

2025 — present

National Taiwan University

2019 — 2025

B.Sc. Interdisciplinary Studies of Human-Computer Interaction & Forestry, Minor Psychology

Research Experience

Social Lab HRI group *Research Assistant*

↔ Prof. Hsiu Ping, Yueh

November 2022 — present

National Taiwan University

- **Developed** system individually in **5+** projects on human-robot interaction.
- Held 2 workshops on multimodal data analysis and voice-based social robot.
- **Organized** 2 training program for undergrad student.
- **Authored** bachelor thesis research, conducted user research over **28** sessions with **7** older adults, and finished **4** system iteration individually.

Classics on Social Robotics *Teaching Assistant*

↔ Prof. Hsiu Ping, Yueh

February 2025 — present

Department of Psychology, NTU

- **Held** workshop for more than **18** hours over 11 students to acknowledge necessary literature review, user test and research, prototyping and programming skills for designing meaningful social robotic systems.
- **Coauthored** with **2** conference poster along with the class.

Awards

Cathay Eminent Prize For designing and implementing conversation robot towards older adults

2025

Startup Prize

2024

For designing and implementing conversation robot towards older adults

Research Projects

ECRobot, an ITS robot *System Developer*

September, 2025 — present

- **The System** containing an iPad app(swift) for handwriting input, NAO app(qi python) for voice user interface(VUI), and backend(fast-api python) for organizing information and providing feedback.
- **Designed** empathetic algorithm based on prospect theory.

TouchHear, an AR assistive learning system *System Developer*

September, 2025 — present

- **Developed** TouchHear system as learning tools for visually impaired student. The system provides audio feedback as the student touches the dotted figures.

Social Robot as Museum Guide *link*

February, 2025 — present

- A project description on its own line so that it can be pretty long, though I can't think of what to write here.

XiaoXiao, a companion robot *Front-end Developer*

Mar, 2024 — Dec, 2025

- **Developed** XiaoXiao VUI system, with intriguing background story, allowing older adults to continually talk with over 40 minutes on average.

Technical Skills

Programming Languages
Languages

Python, Java, Matlab, L^AT_EX & T_EX
Mandarin, English, Japanese

Selected Course Work

Robotics

Introduction to Robotics
Robot Vision
Natural Language Processing
Social Robots
Social Robot Special Topics

Experimental & Computational Psychology

Psychology and Neuroinformatics
Neural and Behavioral Model Construction
Methods of Psychological Experiments
Experiment Design
Statistics in Psychology and Education

Human-Computer Interaction

HCI Design
HCI and User Research
Gerontechnology Design Seminar
Interactive Design
Game of Life