# Ching-Wen Hung

Ph.D. candidate at Graduate Institute of Networking and Multimedia, National Taiwan University

Website: https://kihosi.github.io/

## Research Interests

• Human-Computer Interaction (HCI), Embodied Interaction, Haptics, Virtual/Augmented Reality (VR/AR), Perception and Behavior, Novel Techniques and Interaction

#### Education

• National Taiwan University Ph.D. in Computer Science Advisor: Bing-Yu Chen	Taipei, Taiwan Mar. 2020 -
• National Taiwan University  Master in Information Management and MBA  Advisor: Bing-Yu Chen	Taipei, Taiwan Sep. 2018 - Feb. 2020
• National Central University Bachelor in Information Management Research Experiences	Taoyuan, Taiwan Sep. 2014 - Jun. 2018
• Visiting Faculty Assistant - Embodied Dynamics Laboratory University of Maryland, College Park, Maryland, USA Supervisor: Jun Nishida	Oct. 2023 - Sep. 2024
• Research Assistant - Communications and Multimedia Laboratory National Taiwan University, Taipei, Taiwan Supervisor: Bing-Yu Chen	Sep. 2018 - Aug. 2023

### **Publications**

- TacNote: Tactile and Audio Note-Taking for Non-Visual Access
  Wan-Chen Lee, Ching-Wen Hung, Chao-Hsien Ting, Peggy Chi, Bing-Yu Chen
  In Proceedings of the ACM Symposium on User Interface Software and Technology (UIST 2023). (oral present) [accepted rate: 25.1%]
- Puppeteer: Exploring Intuitive Hand Gestures and Upper-Body Postures for Manipulating Human Avatar Actions
   Ching-Wen Hung, Ruei-Che Chang, Hong-Sheng Chen, Chung-Han Liang, Liwei Chan, Bing-Yu Chen In Proceedings of the ACM Symposium on Virtual Reality Software and Technology (VRST 2022). (oral present) [accepted rate: 26.7%]
- OsciHead: Simulating Versatile Force Feedback on an HMD by Rendering Various Types of Oscillation

<u>Ching-Wen Hung</u>, Hsin-Ruey Tsai, Chi-Chun Su, Jui-Cheng Chiu, Bing-Yu Chen In Proceedings of the ACM Human-Computer Interaction with Mobile Devices and Services (MobileHCI 2022).

In Proceedings of the ACM on Human-Computer Interaction (PACMHCI 2022). (oral present) [accepted rate: 36%]

• ElastOscillation: 3D Multilevel Force Feedback for Damped Oscillation on VR Controllers Hsin-Ruey Tsai, Ching-Wen Hung, Tzu-Chun Wu, Bing-Yu Chen In Proceedings of the ACM Human-Computer Interaction (CHI 2020). (oral present) [accepted rate: 24.31%]

## Projects, Posters, Demos

• Finger-Puppet: Finger-Walking Performance-based Puppetry for Human Avatar Ching-Wen Hung, Chung-Han Liang, Bing-Yu Chen

In Proceedings of the ACM Human-Computer Interaction (CHI 2024 Late-Breaking Work). [accepted rate: 33.88%]

• Puppeteer: Manipulating Human Avatar Actions with Intuitive Hand Gestures and Upper-Body Postures

Ching-Wen Hung, Ruei-Che Chang, Hong-Sheng Chen, Chung Han Liang, Liwei Chan, Bing-Yu Chen In Proceedings of the ACM Symposium on User Interface Software and Technology (UIST Adjunct 2022).

• Tonopoly: A Monopoly-like Board Game with Toio

Chi-Huan Chiang, Ching-Wen Hung

In Proceedings of the ACM Symposium on User Interface Software and Technology (UIST Student Innovation Contest 2021).

• Demonstration of ElastOscillation: A VR Controller Providing 3D Multilevel Feedback for Damped Oscillation

Ching-Wen Hung, Hsin-Ruey Tsai, Tzu-Chun Wu, Bing-Yu Chen

In Proceedings of the ACM Human-Computer Interaction (CHI Extended Abstracts 2020).

# Technical Reports

- Embodied Interaction: Enhancing Immersive Interaction in Virtual and Physical Realities Seminar Talk at National Chung Cheng University (Chiayi, Taiwan) 2024
- PhD Research in HCI: Exploring Embodied Interaction and Funding Opportunities in Taiwan Podcast (Online) 2024
- TacNote: Tactile and Audio Note-Taking for Non-Visual Access

UIST 2023 (San Francisco, California, USA)

TAICHI 2023 (Taipei, Taiwan)

• Puppeteer: Exploring Intuitive Hand Gestures and Upper-Body Postures for Manipulating Human Avatar Actions

VRST 2022 (Tsukuba, Japan)

TAICHI 2022 (Hsinchu, Taiwan)

• Puppeteer: Manipulating Human Avatar Actions with Intuitive Hand Gestures and Upper-Body Postures

UIST 2022 Adjunct (Bend, Oregon, USA)

• OsciHead: Simulating Versatile Force Feedback on an HMD by Rendering Various Types of Oscillation

MobileHCI 2022 (Online Virtual Conference)

TAICHI 2021 (Online Virtual Conference)

• ElastOscillation: 3D Multilevel Force Feedback for Damped Oscillation on VR Controllers CHI 2020 (Online Virtual Conference)

UTokyo-NTU Joint Conf 2019 (Tokyo, Japan)

## Teaching Experiences

• Teaching Assistant

Human Computer Interaction in Industry National Taiwan University
 Instructor: Peggy Chi

 Creative and Design Thinking National Taiwan University
 Instructor: Bing-Yu Chen

Mar. 2020 - Jun. 2020

- Internet Technology in E-Commerce National Central University Instructor: Kuen-Liang Su, Shi-Jen Lin Sep. 2017 - Jan. 2018

### Awards and Grants

## • Ph.D. Students Study Abroad Program

2023 - 2024

Visiting Faculty Assistant at the Department of Computer Science, University of Maryland, College Park National Science and Technology Council, Taiwan

• UIST Travel Award ACM UIST

Oct. 2022

- Subsidy for Domestic Graduate Students to Attend International Academic Conferences 2022 National Science and Technology Council, Taiwan
- Fellowship for Outstanding Ph.D. Student Ministry of Science and Technology, Taiwan

Sep. 2020 - Aug. 2024

• Fellowship for Students of the Direct Pursuit of Ph.D. Degree National Taiwan University, Taiwan

Mar. 2020 - Aug. 2020

• Dean's List Award

Sep. 2015 - Jun. 2017

National Central University, Taiwan

# Leadership

- Demo Chair for TAICHI 2025
- Demo Chair for TAICHI 2023
- Host for TAICHI 2022 Women in STEM Luncheon
- Program Chair for TAICHI 2022
- Host for TAICHI x UIST Online Meeting 2021
- Student Volunteer for Ubicomp 2021 (Online Virtual Conference)
- Student Volunteer for CHI 2021 (Online Virtual Conference)
- Student Volunteer for TAICHI 2019
- Project Leader for Robin Lab 2020 2023
- Instructor for Robin Lab HCIxGraphics Workshop 2020 2022
- Instructor for Robin Lab HCI Workshop 2019

## **Professional Services**

- Committee:
  - TAICHI 2025 Demo Chair
  - TAICHI 2023 Demo Chair
  - TAICHI 2022 Program Chair
- Reviewer:
  - UIST 2025
  - CHI 2025
  - TAICHI 2024
  - CHI 2024 LBW
  - TAICHI 2023
  - CHI 2023 LBW
  - AHs 2023
  - TAICHI 2022
  - TAICHI 2021

# Student Mentoring

• Po-Ying Hsu, Master Student, National Taiwan University

Dec. 2024 - Jul. 2025

• Wan-Chen Lee, Master Student, National Taiwan University	Dec. 2022 - Oct. 2023
• Min-Rui Li, Master Student, National Taiwan University	Feb. 2023 - Jun. 2023
• Wei-Xun Huang, Master Student, National Taiwan University	Feb. 2023 - Jun. 2023
• Hong-Sheng Chen, Master Student, National Taiwan University	Nov. 2021 - Apr. 2022
• Chung Han Liang, Master Student, National Taiwan University	Nov. 2021 - Apr. 2022
• Chi-Chun Su, Master Student, National Taiwan University	Aug. 2020 - Aug. 2021
• Jui-Cheng Chiu, Undergraduate Student, National Taiwan University	Aug. 2020 - Apr. 2021

## References

## • Bing-Yu Chen

Distinguished Professor at Department of Computer Science and Information Engineering / Department of Information Management / Graduate Institute of Networking and Multimedia, National Taiwan University Email: robin@ntu.edu.tw

## • Liwei Chan

Associate Professor at Institute of Computer Science and Engineering, National Yang Ming Chiao Tung University

Email: liweichan@cs.nycu.edu.tw