# Ching-Wen Hung

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

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#### Research Interests

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

#### 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	<b>Taipei, Taiwan</b> <i>Sep. 2018 - Feb. 2020</i>
• 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 - Sept. 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

Ching-Wen Hung, 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

• FingerPuppet: 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

<u>Ching-Wen Hung</u>, Ruei-Che Chang, Hong-Sheng Chen, Chung Han Liang, Liwei Chan, Bing-Yu Chen <u>In Proceedings of the ACM Symposium on User Interface Software and Technology</u> (**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**

- FingerPuppet: Finger-Walking Performance-based Puppetry for Human Avatar CHI 2024 (Honolulu, HI, USA)
- 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)

 $\bullet$  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
 Sep. 2022 - Dec. 2022
 Instructor: Peggy Chi

Creative and Design Thinking National Taiwan University
 Mar. 2020 - Jun. 2020
 Instructor: Bing-Yu Chen

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

## Awards and Grants

• Graduate 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
 Subsidy for Domestic Graduate Students to Attend International Academic Conferences
 National Science and Technology Council, Taiwan
 Fellowship for Outstanding Ph.D. Student
 Ministry of Science and Technology, Taiwan
 Fellowship for Students of the Direct Pursuit of Ph.D. Degree
 National Taiwan University, Taiwan
 Dean's List Award

Leadership

• Demo Chair for TAICHI 2023

National Central University, Taiwan

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

# Student Mentoring

• 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

### • Jun Nishida

Assistant Professor at Department of Computer Science, University of Maryland, College Park

Email: jun.nishida@acm.org