# Ho Yin (Sam) Ng 吳浩賢

M.S. Student in Informatics College of Information Sciences and Technology Pennsylvania State University

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## **EDUCATION**

• M.S., Informatics

College of IST, Pennsylvania State University, 2023 – Present (Expected: Dec. 2024) *Advisor: Dr. Ting-Hao 'Kenneth' Huang.* 

• M.Des., Interaction Design

Dept. Interaction Design, National Taipei University of Technology (Taipei Tech), 2021 – 2023 *Advisors: Dr. Ping-Hsuan Han.* 

Thesis: MovableBlocks: Exploring Dynamic Furniture for Whole-body Interaction in Room-scale Substitutional Reality (易動板塊: 探索在房間規模的替代實境中之動態傢俱的全身互動設計).

B.B.A., Professional Accounting & Information Systems (Double Major),
 Minor: Social Science & Design (Double Minor)
 HKUST Business School, Hong Kong University of Science and Technology (HKUST), 2011 – 2016

## **EXPERIENCE**

- **Pennsylvania State University**, University Park, PA, USA, Nov. 2023 Present. *Graduate Student Researcher*, Advisor: Dr. Ting-Hao K. Huang.
- Taipei Tech, Taipei, Taiwan, Dec. 2021 Jul. 2023. *Graduate Research Assistant*, Advisor: Dr. Ping-Hsuan Han.
- **HKUST**, Hong Kong, Jun. 2017 May 2021. *Education Development Officer*, Dept. Computer Science & Engineering.
- HKUST, Hong Kong, Jun. 2016 May 2017.
   Instructional Assistant, Dept. Information Systems, Business Statistics & Operations Management (ISOM).
- **Baidu Inc.**, Shenzhen, China, Sep. 2015 Jan 2016. *UX Design Intern*, Dept. Operations.
- **Tencent**, Shanghai, China, Jun. 2015 Jul. 2015. *Game Designer Assistant (Intern)*, Aurora Studio
- IBM, Hong Kong, Aug. 2013 Jun. 2014. Analyst Programmer (Placement Student), Global Business Services

## **AWARDS AND HONORS**

• Best Paper Award, UbiComp/ISWC'22 Adjunct: MIMSVAI '22

Ho Yin (Sam) Ng

- Best Demo Award, TAICHI '22
- Bronze Prize Global Final, The 31st Time Young Creative Award 2022

 Outstanding Overseas Chinese Graduate Student Scholarship, Ministry of Education, Republic of China (Taiwan), 2022 – 2023

#### PAPERS UNDER REVIEW

- [UR.2] Ho Yin Ng, [Co-author], [Co-author], [Co-author], [Co-author].(2025). Study on understanding researchers' behaviors and design implications in human-AI interaction for scientific writing. Under Review. Submitted to an international conference in HCI. Keywords: Human-AI Interaction, Empirical Study, Scientific Writing, HCI.
- [UR.1] [Co-author], [Co-author], [Co-author], [Co-author], [Co-author], Ho Yin Ng, [Co-author], [Co-author]. (2025). Study on robotic systems for immersive interaction in virtual environments. Under Review. Submitted to an international conference in VR. Keywords: Immersive Exertion Interaction, Substitutional Robot, Encountered-Type Haptics, VR, Boxing.

## **PUBLICATIONS**

- [7] Ho Yin Ng, Zeyu He, Ting-Hao K. Huang.(2024). What Color Scheme is More Effective in Assisting Readers to Locate Information in a Color-Coded Article? (Short Paper). Accepted for presentation at the 2024 IEEE Visualization and Visual Analytics (VIS 2024), Oct, 2024, Florida, USA.
- [6] Luis Andres Mendez S., **Ho Yin Ng**, Zin Yim Lim, Yi-jie Lu, Ping-Hsuan Han.(2022). MovableBag: Substitutional Robot for Enhancing Immersive Boxing Training with Encountered-Type Haptic. In SIGGRAPH Asia 2022 XR Proceedings (SA '22 XR), Daegu, Korea.
- [5] Ho Yin Ng, Chia-Hui Lin, Zin Yin, Lim, Yi-Jie Lu, Chi-Yu Lin, Ping-Hsuan Han. (2022). PressySofties: Explore Multiplayer Squeeze Interaction with Conducting Fabric Cubes. Invited for demo at The 25th ACM Conference On Computer-Supported Cooperative Work And Social Computing (CSCW '22), Demonstrations Track, Virtual Event.
- [4] Luis Andres Mendez S., Ho Yin Ng, Zin Yin, Lim, Ping-Hsuan Han.(2022). MovableBag: Integrating Haptics and Visual Feedback on Mobile Devices to Enhance the Virtual Reality Experience of Sport Training (MovableBag: 整合體感與視覺回饋以增强虛擬實境體驗的移動式運動訓練裝置). In the 8th Annual Conference of Taiwanese Association of Computer Human Interaction (TAICHI ′22), Demo Track, Taipei, Taiwan.
  Best Demo Award (Top 5%, 1 of 20 accepted demo papers)
  - [3] Ho Yin Ng, Chia-Hui Lin, Zin Yin, Lim, Yi-Jie Lu, Chi-Yu Lin, Ping-Hsuan Han.(2022). PressySofties: Utilize Conductive-Cloth Cube to Explore Squeeze Interaction Among Multi-Users (PressySofties: 利用電容式布方塊來探索多人擠壓互動). In the 8th Annual Conference of Taiwanese Association of Computer Human Interaction (TAICHI '22), Demo Track, Taipei, Taiwan.
- [2] Luis Andres Mendez S., Ho Yin Ng, Ping-Hsuan Han.(2022). MovableBag: Exploring Asymmetric Interaction for Multi-user Exergame in Extended Reality. In Adjunct Proceedings of the 2022 ACM International Joint Conference on Pervasive and Ubiquitous Computing and the 2022 ACM International Symposium on Wearable Computers (UbiComp/ISWC '22 Adjunct), The Second

Ho Yin (Sam) Ng

Workshop on Multiple Input Modalities and Sensations for VR/AR Interactions (MIMSVAI '22), Virtual Event.

Best Paper Award (Top 12.5%, 1 of 8 accepted papers)

[1] Chain Yi Chu, **Ho Yin Ng**, Chia Hui Lin, Ping-Hsuan Han.(2022). PressyCube: An Embeddable Pressure Sensor with Softy Prop for Limb Rehabilitation in Immersive Virtual Reality. In the IEEE International Conference on Multimedia and Expo 2022 (**ICME/ICMEW '22**), Demo Paper, Taipei, Taiwan.

## PROFESSIONAL ACTIVITY

- Student Volunteer, Conference on Human Factors in Computing Systems 2024 (CHI 2024), May 11–16, 2024, Honolulu, HI, USA
- Docent, Hong Kong Art Center, Jul. 2019 Jun. 2021, Hong Kong
  - Curatorial Stream (2019 2021)
  - Educational Stream (2020 2021)

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