Ho Yin (Sam) Ng 吳浩賢

Graduate Student at College of Information Science and Technology (IST)

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RESEARCH INTERESTS

I explore Human-AI collaboration and ethical AI applications, leveraging my experience in haptic feedback systems for Mixed Reality to push the boundaries of immersive technologies and create unprecedented human experiences.

EDUCATION

Pennsylvania State University (Penn State)   University Park, PA, USA
MSc in Informatics   Expected May 2025
Mentors: Dr. Ting-Hao 'Kenneth' Huang. *GPA: 4.00/4.00.*

National Taipei University of Technology (Taipei Tech)   Taipei, Taiwan
MDes in Interaction Design   Jul 2023
Thesis: *MovableBlocks: Exploring Dynamic Furniture for Whole-body Interaction in Room-scale Substitutional Reality*
Mentors: Dr. Ping-Hsuan Han. *GPA: 4.00/4.00.*

Hong Kong University of Science and Technology (HKUST)   Hong Kong
BBA in Professional Accounting and Information Systems,   Nov 2016
minor in Social Science and Design
Upper Second-Class Honours (2:1)
• Exchange Program, Tsinghua University, Beijing, China (Fall 2014)

SELECTED AWARDS AND HONORS

Best Paper Award (UbiComp/ISWC'22 Adjunct)   2022
Bronze Prize - Global Region (The 31st Time Young Creative Award)   2022
Outstanding Overseas Chinese Graduate Student Scholarship (Ministry of Education, Taiwan)   2022 to 2023

RESEARCH EXPERIENCE

Penn State, *Crowd-AI Lab*   University Park, PA, USA
Graduate Research Assistant   Nov 2023 to Present
Advisor: Dr. Ting-Hao 'Kenneth' Huang, Associate Professor

Taipei Tech, *XR Lab*   Taipei, Taiwan
Graduate Research Assistant   Dec 2021 to Jul 2023
Advisor: Dr. Ping-Hsuan Han, Associate Professor

PUBLICATIONS

1. **What Color Scheme is More Effective in Assisting Readers to Locate Information in a Color-Coded Article?**
   Ho Yin Ng, Zeyu He, Ting-Hao K. Huang.
   IEEE Visualization Conference 2024 (VIS 2024).

2. **MovableBag: Substitutional Robot for Enhancing Immersive Boxing Training with Encountered-Type Haptic**
   Luis Andres Mendez S., Ho Yin Ng, Zin Yim Lim, Yi-jie Lu, Ping-Hsuan Han.
   SIGGRAPH Asia 2022 XR (SA '22 XR).

3. **PressySofties: Explore multi-player squeeze interaction with conductive fabric cubes**
   Ho Yin Ng, Chia-Hui Lin, Zin Yin, Lim, Yi-Jie Lu, Chi-Yu Lin, Ping-Hsuan Han.
   The Demonstrations track of 2022 ACM SIGCHI Conference on Computer-Supported Cooperative Work Social Computing (CSCW 2022 Demo).

4. **Demo: MovableBag: Mobile Device Integrating Haptics and Visual Feedback to Enhance Virtual Reality Experience of Sport Training**
   Luis Andres Mendez S., Ho Yin Ng, Zin Yim Lim, Ping-Hsuan Han.
   The 8th Annual Conference of Taiwan Association of Computer-Human Interaction (TAICHI 2022).
   Best Demo Award (1 out of 20 accepted demo papers)

5. **Demo: PressySofties: Utilize conductive-cloth cube to explore squeeze interaction among multi-users**
   Ho Yin Ng, Chia-Hui Lin, Zin Yin, Lim, Yi-Jie Lu, Chi-Yu Lin, Ping-Hsuan Han.
   The 8th Annual Conference of Taiwan Association of Computer-Human Interaction (TAICHI 2022).

6. **MovableBag: Exploring Asymmetric Interaction for Multi-user Exergame in Extended Reality**
   Luis Andres Mendez S., Ho Yin Ng, Ping-Hsuan Han.
   The 2022 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp/ISWC' 22 Adjunct).
   Best Paper (1 out of 8 accepted papers)

7. **PressyCube: An Embeddable Pressure Sensor with Softy Prop for Limb Rehabilitation in Immersive Virtual Reality**
   Chain Yi Chu, Ho Yin Ng, Chia Hui Lin, Ping-Hsuan Han.
   IEEE International Conference on Multimedia and Expo 2022 (ICME 2022).

TEACHING EXPERIENCE

Penn State	University Park, PA, USA
Teaching Assistant, College of IST	Jan 2024 to Present
HCDD 440: Human-Centered Design and Development Capstone Course.	Spring 2024

Taipei Tech	Taipei, Taiwan
Teaching Assistant, Department of Interation Design	Feb 2022 to Jun 2023
AC02509: Creating 360 Panoramic Virtual Reality Video.	Spring 2022
AC06206: Game Media Design.	Fall 2022

AC05207: Virtual Reality Application.	Spring 2023

HKUST — Hong Kong
Instructional Assistant, Department of ISOM — Jun 2016 to May 2017

ISOM5290: Information Systems Development Methodologies.	Spring 2017
ISOM3210: Information Systems Analysis and Design.	Spring 2017
ISOM3010: Information Systems Project Management.	Spring 2017
ISOM4100: Information Systems Auditing.	Fall 2016, Winter 2017
ISOM3230: Business Applications Programming.	Fall 2016

INDUSTRY EXPERIENCE

HKUST — Hong Kong
Education Development Officer, *Dept. of Computer Science & Engineering* — Jun 2017 to May 2021

Baidu Inc. — Shenzhen, China
UX Design Intern, *Department of Operations* — Sep 2015 to Jan 2016

Urban Discovery — Hong Kong
Media Assistant — Aug 2015 to Sep 2015

Tencent — Shanghai, China
Game Designer Assistant, *Aurora Studio* — Jun 2015 to Jul 2015

ChangePlus — Beijing, China
Intern (Technical Group) — Dec 2014 to Jan 2015

Polljoy Inc. — Hong Kong
Developer Advocate — Jul 2014 to Sep 2014

IBM — Hong Kong
Analyst Programmer (Placement Student), *Global Business Services* — Aug 2013 to Jun 2014

Forerunner Technology Limited — Hong Kong
User Acceptance Test (UAT) Tester — Feb 2013 to May 2013

KPMG — Hong Kong
Elite Programme Intern — Aug 2012 to Jan 2013

SKILLS

Technical Skills

- *Programming*: Proficient in Java, VB.Net, and Web Development; Experienced with C# and Python
- *Immersive Technology*: Unity (for game development and VR/AR applications)
- *Research Data Analysis and Visualization*: Proficient in Excel; Experience with Python and R

Design
- *UI/UX Design*: Proficient in Figma and Adobe XD
- *Graphic Design*: Proficient in Adobe Illustrator and Photoshop
- *Video Editing*: Experienced with Adobe Premiere Pro

Languages

English (fluent), Chinese (fluent), Cantonese (native)

SERVICE AND OUTREACH

CHI 2024 Honolulu, Hawaii, USA
Student Volunteer May 2024

Hong Kong Art Center Hong Kong
Docent Jul 2019 to Jun 2021

Last Updated: July 18, 2024