

Education

2017- PhD student, Information Science

Cornell University, Ithaca, NY, USA

- Main research interest: Human-Robot Interaction (HRI) and UX Design
- Advisor: Professor Malte Jung
Committee Members: Professor Sue Fussell, Professor Arpita Ghosh
- In my current study, “My robot leader is better than any human: the Influence of Power in Human-Robot Mixed Teams”, I found out that the organizational factors also affect the collaboration between humans and AI-powered agents. Specifically, people in a mixed team will be influenced by the leader more, regardless of the leader being an intelligent agent or a human.

2013-2014 Master of Science, Human-Computer Interaction with Ergonomics

University College London (UCL), London, UK

- Advisor: Professor Yvonne Rogers.
- Dissertation: *Seeing More or Less? An In-the-Wild Study Comparing How Pedestrians Use Smartphone Maps (Google map) Versus Paper Maps*. I found people remembered more road names while using paper maps, but more street scenes when using google map app. Google map users also checked map more *after* they made turns, not before.
- Solid training in human-centered design practice, usability testing, interface design, and ergonomic methodologies.

2008-2011 Bachelor of Science, Psychology, National Taiwan University (NTU), Taipei, Taiwan

- Solid training in Cognitive psychology, experimental design, and statistics.

2007-2011 Bachelor of Art, Industrial Design, Shih-Chien University, Taipei, Taiwan

- Strong skills for the whole design process: ideation, sketching, and low- and high-fidelity prototyping.

2003-2007 Medicine, NTU, Taipei, Taiwan

- Received traditional medical school training before transferring to design school.
- Lab experience in molecular biology, especially virology.

Professional Experience

2015-2016 UX Designer/Researcher, ASUS Design Center, ASUS Computer Inc., Taipei, Taiwan

- Chief UX designer for Zenbo (Asus home robot): led design process including user study, ideation, system architecture, interaction guideline, voice interface, emotion expression, posture and movement design, resulting in the creation of 11 native apps.
- Zenbo: Wrote *Design Guideline for Zenbo*, the official document for developers.
Apps including Phone, Message, Contact, Music, Calendar, and To-Do List: Developed the information architecture, interaction flow, and wireframes.

- 2013, 2014 **Interaction Designer**, Kuchi Co. Ltd., Taipei, Taiwan
- 2009-2010 **Special Contract Designer**, Yonder Film Co. Ltd., Taipei, Taiwan
- 2008-2013 **Special Contract Designer**, KangSi Cultural Co. Ltd., Taipei, Taiwan
- 2009-2013 **Design Director**, Vox Nativa Music Association, Nantou, Taiwan
- 2008 **Summer intern**, Process Design
- 2007-2009 **Contract Designer**, Vox Nativa Music Association, Nantou, Taiwan

Publications

1. **Hou, Y. T. Y.**, Lee, W. Y., Jung, M. 2018. "My robot leader is better than any human: the Influence of Power in Human-Robot Mixed Teams," In preparation.
2. Guo, J., **Hou, Y. T. Y.**, Muller, H., Tang, K., & Fussell, S. R. (2019, May). As If I Am There: A New Video Chat Interface Design for Richer Contextual Awareness. In CHI'19 extended abstracts on Human factors in computing systems. ACM. Glasgow.
3. Lee, W. Y., **Hou, Y. T. Y.**, Zaga, C., & Jung, M. (2019, March). Design for Serendipitous Interaction: BubbleBot-Bringing People Together with Bubbles. In *2019 14th ACM/IEEE International Conference on Human-Robot Interaction (HRI)*(pp. 759-760). IEEE.
4. Tennent, H., Lee, W. Y., **Hou, Y. T. Y.**, Mandel, I., & Jung, M. 2018, October. "PAPERINO: Remote Wizard-Of-Oz Puppeteering For Social Robot Behaviour Design," In Companion of the 2018 ACM Conference on Computer Supported Cooperative Work and Social Computing (pp. 29-32). ACM.
5. **Hou, Y. T. Y.**, Jung, M. 2018, "Robots in Power," In Proceedings of Longitudinal Human-Robot Teaming Workshop at HRI '18. ACM, Chicago, USA.
6. **Hou, T.Y.**, Rogers, Y. 2016, "Seeing More or Less? An In-the-Wild Study Comparing How Pedestrians Use Smartphone Versus Paper Maps," Degree Dissertation.
7. Chang, Y.C., **Hou, T.Y.**, Lu, C.H. 2012, "Investigating human performance on large touchscreen: the effect of angle, location and icon size," Paper presented at Order in Disorder: USC International Design Theory and Practice Conference, Taipei, Taiwan.

Research Experience

- 2018-2019 **Research Assistant**, Professor Arpita Ghosh, Information Science, Cornell University
- Mathematical modeling of emotion communication in human-human and human-robot interactions with Professor Arpita Ghosh and Professor Robert Kleinberg.
- 2018 **Research Assistant**, Professor Poppy McLeod, Communication, Cornell University
- Investigated the effect of different negative emotions (hostile/non-hostile) in a work scenario, specifically on people's self-esteem and perceived existential threat.
- 2012-2013 **Research Assistant**, Design Psychology Lab, Shih-Chien University
- Investigated user behavior with new-generation large touchscreen device with ASUS design research team.
 - Prepared design thinking lessons suitable for design school students.

Teaching Experience

- 2018, 2019 **Teaching Assistant**, Networks II, Professor Arpita Ghosh, Cornell University
- 2017 **Teaching Assistant**, Web Programming and Design, Lecturer Kyle Harms, Cornell University
- 2011-2013 **Co-instructor**, *Psychology in Human Factors and Design*, with Prof. Yeh, Yei-Yu, NTU

Talks and Workshops

- 2016-2018 **Workshop speaker**, *Workshop: The look of behavior design*, Soochow University
- 2016-2017 **Workshop speaker**, *Workshop: The look of behavior design*, NTU
- 2012 **Invited speaker**, E-commerce Conference on User Experience Research and Design, Taipei, Taiwan

Selected Design Works

- 2017 Logo design, Environmental Protection, Executive Yuan, Government of Taiwan
- 2016-2017 System architecture, voice interface, interaction design for *Zenbo* (Home robot), ASUS
- 2015-2016 User interface and interaction design for apps on *Zenfone 2* and *Zenwatch 2*, ASUS
- 2015 Album Art for “*My favorite*”, Taiwan Vox Nativa Music School
- 2010-2013 *Biology (official high school textbook)*, Ministry of Education, Government of Taiwan
- 2012 Movie poster for documentary film “*Sing it+*”, Key Point Production
- 2011 *National Day Brochure*, Office of the President, Government of Taiwan
- 2010 Movie poster for Golden Horse Award winning “*Let the wind carry me*”, Yonder Film
- 2007 *The Guide for Freshmen*, National Taiwan University
- 2006 *Official Campus Map*, National Taiwan University

Technical Skills

Design: Adobe Suite (professional level in Photoshop, Illustrator, Premiere), AutoCAD, Microsoft Visio, Balsamiq.

Statistics: SAS, R

Programming: Python, Java, Html/CSS

Language (Native): Chinese Mandarin, Taiwanese

Language (Fluent): English

Language (Intermediate): Japanese (3years), Deutsch (2 years)

Test Scores

GRE: Verbal: 166/170 (96%), Quantitative: 170/170 (99%)

TOEFL: 114/120 (READING: 30, LISTENING: 30, SPEAKING: 26, WRITING: 28)

IELTS: 8.0/9.0 (READING: 9.0, LISTENING: 8.5, SPEAKING: 7.5 WRITING: 7.5)

Taiwan College Entrance Exam: 75/75 (2003), 74/75 (2007), 75/75 (2008)

Awards and Honors

- 2018 **Government Scholarship for Studying Abroad**, Ministry of Education, Taiwan
- 19 admission each year for all Taiwanese students abroad in design & architecture
- 2018 **Outstanding Teaching Assistant Award 2018**, Information Science, Cornell University
- 2017 **Government Fellowship for Studying Abroad**, Ministry of Education, Taiwan
- 1 admission each year for all Taiwanese students abroad in design & architecture
- 2017 **Red Dot Design Awards, Zenbo (Home Robot)**, Red Dot, Essen, Germany
- Awarded for Zenbo's product design and UX design to the Asus design team, where I was the chief UX designer.
- 2014 **Distinction Master Dissertation**, Interaction Centre, University College London
- 2011 **Best 100 New Designers of the Year**, Taiwan New Generation Design Exhibition
- 2002 **Gold Medalist**, International Biology Olympiad