

Yoyo Tsung-Yu Hou

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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

2019 UX Researcher Intern, Facebook, Menlo Park, CA, USA

- Helped establishing a long-term tracking system of civic harm on Facebook and Instagram, monitoring signals such as fake news, election intervention, and voter suppression.

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

- Gave 12 lectures on mathematical modeling of market matching

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