

Pei-Yao Hung

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Research Interest

Human-Computer Interaction, Computer-Supported Cooperative Work,
Ubiquitous Computing, Health Informatics

Education

- 09/2010 – *anticipated* **University of Michigan**
06/2019 PhD in Information Science
Ann Arbor, MI, USA MS in Human-Computer Interaction
Advisors: Mark Ackerman
- 09/2002 – 08/2008 **National Taiwan University**
Taipei, Taiwan MS in Computer Science and Information Engineering (thesis T.01 below)
BS in Computer Science and Information Engineering
Advisors: Hao-Hua Chu
Committee: Jane Yung-Jen Hsu, and Tei-Wei Kuo

Professional Experience

- 09/2012 – *present* **School of Information, University of Michigan**
Ann Arbor, MI, USA Graduate Student and researcher
- 09/2011 – 06/2012 **School of Information, University of Michigan, Research Assistant**
Ann Arbor, MI, USA Designed and implemented features of RePlay, a tool to playback sensor traces to support context-aware system design and development. (C.01)
- 02/2011 – 08/2011 **School of Information, University of Michigan, Developer**
Ann Arbor, MI, USA Revised and maintained an on-line test and questionnaire system to investigate students' awareness of security issues when using information technology.

- 09/2009 – 06/2010 **Institute of Information Science, Academia Sinica, Research Assistant**
 Taipei, Taiwan Designed a storytelling platform for elderly to revitalize psychological functions through the process of recall memory of the past and present.
- 09/2008 – 06/2009 **Industrial Technology Research Institute of Taiwan, Researcher Intern**
 Hsinchu, Taiwan Investigated and utilized Wi-Fi signal pattern at crossroad to facilitate navigation system development.
- 07/2008 – 06/2012 **Freelance, Web Developer**
 Taipei, Taiwan Designed and implemented features of an on-line chamber customization platform, HaisonTech.
- 07/2007 – 08/2007 **Freelance, Game Programmer**
 Taipei, Taiwan Designed and programmed the game flow and interaction of two installation games to teach children about information technology and health issues in a science exhibition held by Taiwan's National Science Council.
- 09/2006 – 06/2008 **National Taiwan University, Research Assistant**
 Taipei, Taiwan Designed and Developed Cutting game, a computer game that facilitates in training, recording, and evaluating the visual-motor abilities of autistic children. (W.01, T.01)

Publications

Refereed Conference

- C.01 Chang, Yung-Ju, **Pei-Yao Hung**, Mark W. Newman (2012). TraceViz: 'Brushing' for Location Based Services. *ACM International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI)*, San Francisco, CA, USA, September 21–24. pp 345–348

Book Chapter

- B.01 Merrit, David, **Pei-Yao Hung**, Mark S. Ackerman (2016). Expertise Finding: A Socio-Technical Design Space Analysis, in *Expertise, Communication, and Organizing*, Treem, Jeffrey and Paul Leonardi (eds.), Oxford University Press, 2016.

Refereed Workshop & Doctoral Consortium

- W.03 Kaziunas, Elizabeth, **Pei-Yao Hung**, Mark S. Ackerman (2014). FIT2: Information Translations for Health Practices. *International Workshop on Collaboration and Coordination in the Context of Informal Care (CCCiC)*, *ACM Conference on Supporting Groupwork (GROUP)*, Sanibel Island, FL, USA, November 9.
- W.02 Chang, Yung-Ju, Mark W. Newman, **Pei-Yao Hung**, Manchul Han (2013). Integrating Capture & Playback into Context-Aware Systems Development. *International Symposium of Chinese (ChineseCHI)*, *ACM Conference on Human Factors in Computing Systems (CHI)*, Paris, France, April 28.

- W.01 **Hung, Pei-Yao**, Jin-Ling Lo, Hsin-Yen Wang, Hao-Hua Chu, Ya-Lin Hsieh (2009). CuttingGame: A Computer Game to Assess & Train the Visual-motor Integration Ability for Preschool Children with Autism. Interactive Creative Play with Disabled Children Workshop, *ACM SIGCHI Interaction Design and Children (IDC)*, Como, Italy, June 3.

Work In Progress

- WIP.2 Merritt, David, Mark W. Newman, **Pei-Yao Hung**, Mark S. Ackerman, Erica Ackerman (2015) Using Expertise for Crowd-sourcing. *AAAI Conference on Human Computation and Crowdsourcing (HCOMP)*, San Diego, USA, November 8-11.
- WIP.1 **Hung, Pei-Yao**, Mark S. Ackerman (2015) Discount Expertise Metrics for Augmenting Community Interaction. *ACM International Conference on Communities and Technologies (C&T)*, Limerick, Ireland, June 27-30.

Thesis

- T.01 **Hung, Pei-Yao** (2008). A Computer Cutting Game to Train Hand Function for Children. *NTU MS Thesis*, Taipei, Taiwan, August.

Awards

- Fall 2010 **University of Michigan Mobile Apps Challenge Runner-Up**
Designed a mobile application that manages personal emotion, with the goal of helping users reflect on their emotions and be aware of others' emotions. In collaboration with Ying-Yu Chen.
- Winter 2010 **University of Michigan iDesign Competition Second Place**
Designed visualization to create a new browsing interface for University Library's music collection. In collaboration with Gin L Chieng, Pei-Chih (Bell) Shih, Sylvia Szu-Hsuan Lai, and Yi-Ying Lin.

Invited Presentations

- 07/16/2016 **National Tsing Hua University Institute of Information Systems and Applications**
Hsinchu, Taiwan Discount Expertise Metrics for Augmenting Community Interaction
- 06/06/2012 **National Chengchi University Department of Computer Science**
Taipei, Taiwan HCI Program and Research at the University of Michigan School of Information
- 05/13/2011 **National Taiwan University Department of Computer Science & Information Engineering, Intelligent Agents Lab**
Taipei, Taiwan Contextual Design Process Experience Sharing

Service

Program Committee

2017 Taiwan Computer-Human Interaction Conference (Tai-CHI)

Peer Reviewing

2017 ACM SIGCHI Conference on Designing Interactive Systems (DIS)

2016 – 2017 ACM Conference on Human Factors in Computing Systems (CHI)

2016 – 2017 ACM International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI)

2016 Taiwan Computer-Human Interaction Conference (Tai-CHI)

Other

09/2014 – 06/2016 Michigan Interactive and Social Computing (MISC) student organizer

09/2013 – 06/2014 University of Michigan School of Information Doctoral Executive Committee (DEC) officer

Teaching

01/2015 – 04/2015 **Graduate Student Instructor – Introduction to Information Studies**
University of Michigan Led 3 semester-long discussion sessions (above 15 students per session) to examine weekly topics, taught a 1.5 hours lecture in Human-Computer Interaction with 240 undergrad students, designed 2 weekly lesson plans as the guidance for other instructors, and graded response papers and visualization projects to improve students' writing and visual presentation.

09/2014 – 12/2014 **Graduate Student Instructor – Networked computing: Storage, Communication and Processing**
University of Michigan Developed and led 3 semester-long weekly lab sessions (above 15 master students per session) to examine important programming and computer concepts and provided one on one instructions, graded programming assignments to provide feedback about the design and implementation of homework solutions, and held office hours weekly to answer additional questions.

January 2009 **Instructor – Object Oriented Programming using C#**
National Taiwan University Developed syllabus, wrote lectures, created projects, presented, and graded, successfully facilitated understanding of programming, resulting in 5 students with no technology background developing a simple calculator with graphic user interface in ten days.

Fall 2006 **Teaching Assistant – Database Systems**
National Taiwan University Graded assignments and held weekly office hours to answer students' questions.

Students Supervised and Mentored

Undergraduate and Master's

09/2015 – 05/2016 **A team with 5 master students who became CHI 2016 Student Design Competition Finalist**
University of Michigan Guided analysis of interview data, provided critique of findings and design recommendations, suggested writing revisions and polished presentation flow.
See "Dot-it: Managing Nausea and Vomiting for A Peaceful Pregnancy with Personal Pattern Exploration" in ACM Digital Library.