Grace (Yu-Chun) Yen

HCI/UX Researcher, PhD in Human-Computer Interaction
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EDUCATION

University of Illinois at Urbana-Champaign, Urbana, Illinois — **2013- 2020 (expected)**
PhD Candidate in Computer Science, *Research Area*: Human-Computer Interaction for Creativity Support
Advisor: Dr. Brian P. Bailey

National Taiwan University (NTU), Taipei, Taiwan — **2009 - 2011**
M.S. in Computer Science, *Research Area*: Artificial Intelligence for Pervasive Healthcare
Advisor: Dr. Li-Chen Fu

National Taiwan Normal University (NTNU), Taipei, Taiwan — **2005 - 2009**
B.E. in Computer Science, *Research Area*: Computer Vision for Education
Advisor: Dr. Chiung-Yao Fang

PROFESSIONAL SKILLS

Quantitative Methods: Statistical testing, behavior analysis, machine learning

Qualitative Methods: Survey design, Interview, Prototyping, Field research, Contextual inquiry

Programming languages: Python, JavaScript, jQuery, PHP, MySQL, JAVA, C++

Data analysis: R, SPSS, Tableau, JMP

Sketch tools: Balsamiq, Adobe XD, HTML/CSS

WORK EXPERIENCE

Adobe Inc., San Francisco, CA — **2019 Summer**
HCI Research Intern. Host: Joy O. Kim
- Led design-based research that implemented novel tools for capturing relationships between feedback and actions.
- Presented research findings at multiple product research groups and publish an academic paper in ACM CHI 2020
- Closely collaborated with creative directors, product managers, UI/UX designers, and engineers to identify designers' pain-points when receiving and managing feedback provided by multiple stakeholders

Adobe Inc., San Francisco, CA — **2018 Summer**
HCI Research Intern, Creative Intelligence Lab, Host: Dr. Joy Kim
- Conducted formative research identifying the strategies when expert designers manage feedback from multiple stakeholders.
- Build an visualization tool that helped beginner designers feel less overwhelmed during feedback interpretation tasks and better attend to critical issues and conflicting opinions compared to using a typical document-editing tool.
- Performed both qualitative (**survey, screen-recording, interview**)and quantitative (**one-sample t-test,paired t-test**) data analysis techniques to gain insights from user research with twenty beginner designers.

National Science Council (Taiwan), Taipei, Taiwan — **2011 – 2013**
Project Manager / Lead Software Engineer, Supervisor: Dr. Greg Lee
- Led a national project on collaborative learning for computer science education. Collaborated with a diverse set of CS instructors in both universities and high schools. The final platform has been deployed in multiple large-scale programming classes in Taiwan.

RESEARCH EXPERIENCE

Orchid Research Group, University of Illinois at Urbana-Champaign, Champaign, IL — **2013- present**
Doctoral Graduate Researcher, Advisor: Brian P. Bailey

- Designing lightweight interventions for increasing feedback engagement in online spaces.
- Reporting empirical results showing how including and ordering different interventions in the feedback loop improves design performance and perceptions of performance.
- Implementing practical systems (over 3000 users) for hosting large scale field study in creative domains.
- Quantifying the effect of online platforms (e.g., Reddit, Facebook, MTurk) and design stages (early versus late-stage) on feedback generation.

Smart Home Group @ Intelligent Robot and Automation Lab, NTU, Taipei, Taiwan **2009-2011**
Graduate Researcher, Advisor: Li-Chen Fu
- Built a smart ward in the NTU Hospital using pervasive and machine learning technology.
- Conducted ethnography research observing and recording the interactions between medical staff and post-surgery patients.
- Translated user insights into design principles for developing ambient sensing technology in the real-world hospital.
- Closely collaborated with surgeons, psychologists, and engineers (won the Best Master's Thesis). Built trust with post-surgery elderly patients to participate in our field research.

Computer Vision and Image Understanding Lab, NTNU, Taipei, Taiwan **2008-2009**
Undergraduate Research Assistant , Advisor: Chiung-Yao Fang
- Built a vision-based gymnastics motion recognition system. The goal is to support self-training for beginners.

HONORS and AWARDS

[H6] **Dissertation Completion Fellowship**, University of Illinois at Urbana-Champaign *2019*

[H5] **Grace Hopper Conference Grant**, University of Illinois at Urbana-Champaign *2017*

[H4] **Muroga Endowed Fellowship**, University of Illinois at Urbana-Champaign *2013*

[H3] **Best Master Thesis Award**, Taiwanese Association for Artificial Intelligence, Taiwan *2011*

[H2] **NSC Undergraduate Research Grant**, National Science Council, Taiwan *2009*

[H1] **Distinguished Undergraduate Scholarship**, full tuition support awarded to the top 1% student *2005-2009*

PUBLICATIONS (PEER-REVIEWED) All files are available at grace-yen.com

[C9] **Yu-Chun Grace Yen**, Joy O. Kim, and Brian P. Bailey. *Decipher: An Interactive Visualization Tool for Interpreting Unstructured Design Feedback from Multiple Providers.* In Proceedings of the ACM Conference on Human Factors in Computing Systems, 14 Pages. (CHI '20) [To appear]

[C8] Chi-Hsien Yen, **Yu-Chun Grace Yen**, and Wai-Tat Fu. *An Intelligent Assistant for Mediation Analysis in Visual Analytics.* ACM Conference on Intelligent User Interface, Pages 432-436. (IUI '19) [paper]

[C7] **Yu-Chun Grace Yen**, Steven P. Dow, Elizabeth Gerber, and Brian P. Bailey. *Listen to Others, Listen to Yourself: Combining Feedback Review and Reflection to Improve Iterative Design.* In Proceedings of the 2017 ACM SIGCHI Conference on Creativity and Cognition, Pages 158–170. (C&C '17) [paper]

[C6] Helen Wauck, **Yu-Chun Grace Yen**, Wai-Tat Fu, Elizabeth Gerber, Steven P. Dow, and Brian P. Bailey. 2017. *From in the Class or in the Wild? Peers Provide Better Design Feedback Than External Crowds.* In Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems, Pages 5580-5591 (CHI '17). [paper]

[C5] **Yu-Chun Grace Yen.** *Enhancing the Usage of Crowd Feedback for Iterative Design.* In Proceedings of the 2017 ACM SIGCHI Conference on Creativity and Cognition, Pages 513-517. (C&C '17) . [paper]

[C4] **Yu-Chun Grace Yen**, Steven P. Dow, Elizabeth Gerber, and Brian P. Bailey. *Social Network, Web Forum, or Task Market? Comparing Different Crowd Genres for Design Feedback Exchange*. In Proceedings of the 2016 ACM Conference on Designing Interactive Systems, Pages 773-784 (DIS '16). [paper]

[J1] Chun-Feng Liao, **Yu-Chun Grace Yen**, Yu-Chiao Huang, and Li-Chen Fu. *An Empirical Study on Engineering a Real-World Smart Ward Using Pervasive Technologies.* In IEEE Systems Journal. Vol. PP, No.99, pp.240-249, 2016. [paper]

[C3] Yu-Chiao Huang, Chun-Feng Liao**, Yu-Chun Grace Yen**, Li-Jen Hou, Li-Chen Fu, Chia-Hui Chen, Chiung-Nien Chen. *An Extensible Situation-Aware Caring System for Real-World Smart Wards*. In Proceeding of the International Conference on Smart Homes and Health Telematics, Pages 190-197 (ICOST 2012). [paper]

[C2] **Yu-Chun Grace Yen**, Jiun-Yi Li, Ching-Hu Lu, Tsung-Han Yang and Li-Chen Fu. *Human-Centric Situational Awareness in the Bedroom.* In Proceeding of the International Conference on Smart Homes and Health Telematics, Pages 72-79 (ICOST

2011). [paper]

[C1] **Yu-Chun Grace Yen**, Ching-Hu Lu, Yi-Chung Cheng, Jing-Siang Chen, and Li-Chen Fu. *Towards an Evidence-Based and Context-Aware Elderly Caring System Using Persuasive Engagement.* In Proceeding of the International Conference on Human-Computer Interaction, Pages 240-249 (HCII 2011). [paper]

Yu-Chun Grace Yen. *Human-centric and Situation-aware Pervasive Healthcare System in the Hospital for Elderly People.* Master's Thesis**.** National Taiwan University, Taiwan, 2011. (**Best Master's Thesis Award** [H3]) [Thesis]

Yu-Chun Grace Yen, Li-Chen Fu, Tsung-Han Yang, Fang-Cheng Liu, and Chun-Feng Liao. *An information processing system based on multi-layer inference architecture*. **PATENT** ID# I486914. Valid from June 2015 to May 2032. [link]

MENTORING/TEACHING EXPERIENCE

PURE Undergraduate Research Program, University of Illinois. *2017 Fall*
Research mentor: mentored three undergraduate students and two master students for their research projects

CS 565-Human-Computer Interaction, University of Illinois *2015, 2017 Spring*
Teaching Assistant. led discussions on a broad set of HCI topics. Mentored eight research projects on the topic of leveraging crowdsourcing technology for iterative design.

CS 465-User Interaction Design, University of Illinois *2014 Fall, 2017 Fall*
Instructor, Taught the principles of user interface design and mentored term projects on the topic of mobile and Web interface design.

Introduction to Web Design, SSCV High School, Taipei, Taiwan *2009 Fall*
Practice Teacher

ACADEMIC AND COMMUNITY SERVICES

Paper Reviewer

- CSCW 2020 (received **Special Recognition of Outstanding Review**)
- CSCW 2018
- CHI 2020
- DIS 2017
- Creativity & Cognition 2018
- Creativity & Cognition 2019

Graduate Ambassador of UIUC CS Department

Coordinator, HCI Seminar, scheduling and coordinating talks given by external speakers

REFERENCES

Brian P. Bailey | Ph.D. Advisor | Professor, University of Illinois at Urbana-Champaign

email: bpbailey@illinois.edu ; website: https://cs.illinois.edu/directory/profile/bpbailey

Joy O. Kim |Research Mentor|Research Scientist, Adobe Creative Intelligence Lab

email: joykim@adobe.com ; website: http://www.joyk.im/

Karrie Karahalios|Dissertation Committee|Professor, University of Illinois at Urbana-Champaign & Researcher, Adobe

email: kkarahal@illinois.edu ; website: http://social.cs.uiuc.edu/people/karriekarahalios.html

Li-Chen Fu |M.S. Thesis Advisor|Professor, National Taiwan University

email: lichen@ntu.edu.tw ; website: http://www.ee.ntu.edu.tw/bio1?id=23

Greg Lee| Project Manager|Executive Vice President, National Taiwan Normal University

email: leeg@csie.ntnu.edu.tw ; website: http://en.ntnu.edu.tw/office-of-the-evp.php