Grace (Yu-Chun) Yen

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EDUCATION

University of Illinois at Urbana-Champaign, Urbana, Illinois 2013-2020 (expected) PhD Candidate in Computer Science, Research Field: 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 Field: 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 Field: 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 Tool: R, 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. *Research mentor: mentored three undergraduate students and two master students for their research projects	2017 Fall
CS 565-Human-Computer Interaction, University of Illinois <i>Teaching Assistant</i> . led discussions on a broad set of HCI topics. Mentored eight research projects on the topic of leveraging crowdsourcing technology for iterative design.	2015, 2017 Spring
CS 465-User Interaction Design, University of Illinois <i>Instructor,</i> Taught the principles of user interface design and mentored term projects on the topic of mobile and Web interface design.	2014 Fall, 2017 Fall
Introduction to Web Design, SSCV High School, Taipei, Taiwan Practice Teacher	2009 Fall

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