Grace (Yu-Chun) Yen

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EDUCATION

University of Illinois at Urbana-Champaign, Urbana, Illinois (*G.P.A. 3.9/4.0*) **Aug 2013- Aug 2020**
PhD in Computer Science, Human-Computer Interaction Group
Dissertation Title: Turning feedback to actions through reflection, paraphrasing, and visualization.
Advisor: Dr. **Brian P. Bailey** Received Merit-based Dissertation Completion Fellowship
Committee: Dr. Joy Kim (Adobe), Dr. Steven Dow (UCSD), Dr. Karrie G. Karahalios (UIUC), Dr. Wai-tat Fu (UIUC)

National Taiwan University (NTU), Taipei, Taiwan (*GPA: 4.0/4.0*) **Aug 2009 - June 2011**
M.S. in Computer Science, Intelligent Robot and Automation Lab,
Thesis Title: Human-centric and situation-aware pervasive healthcare system in the hospital for elderly People.
Advisor: Dr. **Li-Chen Fu**. Awarded as the *Best Master's Thesis* in Taiwanese Association of Artificial Intelligence
Committee: Dr. Cheryl Chia-Hui Chen (NTU Nursing), Dr. Mu-Chun Su (NCU HCI), Dr. Chiung-Nien Chen (NTU Medicine)

National Taiwan Normal University (NTNU), Taipei, Taiwan *GPA: 3.91/4.0 (top 1%)* **Aug 2005 - June 2009**
B.E. in Computer Science, Computer Vision and Image Understanding Lab
Senior Thesis: Vision-based Gymnastics Motion Recognition System.
Advisor: Dr. **Chiung-Yao Fang**. Received *National Science Council Undergraduate Research Grant*

PROFESSIONAL SKILLS

Quantitative Methods: statistical test, survey design, log analysis, data mining
Qualitative Methods: user interview, usability testing, grounded theory, prototyping, on-site field observations
Programming languages: JavaScript, jQuery, Python, PHP, MySQL, HTML/CSS, JAVA, C++
Data analysis: R, Tableau, JMP

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]

PROFESSIONAL EXPERIENCE

University of Illinois at Urbana-Champaign, Champaign, IL   **Aug 2013 - present**
Research Assistant, Human-Computer Interaction Group. Advisor: Dr. Brian P. Bailey
-   Lead independent, mixed-method research projects on crowdsourcing, online feedback exchange, creativity support tools.
-   Design and execute formative study (e.g. **interviews**, **survey**, **think-aloud** tasks) to identify research opportunities for improving online feedback services.
-   [C4, C5] Investigated how user incentives affect online feedback generation (**ANOVA, content analysis**).
-   [C6, C7] Designed and implemented tools **Javascript, jQuery, PHP, Python, HTML/CSS**) for supporting feedback interpretation.
-   Performed controlled experiments to evaluate tool effectiveness (**AN(C)OVA, t-test, qualitative coding on survey responses**) .
-   Publish and present research outcomes in top-tiered HCI conferences (e.g., ACM CHI, DIS, Creativity Cognition)

Adobe Inc., San Francisco, CA   **2018, 2019 Summer**
Research Intern, Creative Intelligence Lab, Host: Dr. Joy Kim
-   Directed two internship projects on the topic of supporting feedback interpretation in online communities.
-   Conducted semi-structured **interviews** with **think-aloud** activities (both **in-person** and **remote**) with designers from large software companies and online freelancing platforms.
-   Designed and implemented interactive **visualization** tools for structuring textual feedback (2018) and recording revision history (**Javascript, JQuery, HTML/CSS, and Python/Django**).
-   Created **prototypes** using user experience design tools (e.g. Adobe XD, inVision) to test concepts.
-   Designed, executed, and analyzed data using both qualitative (**iterative coding, screen recording**) and quantitative (**one-sample t-tests, paired t-test, survey**) methods.
-   Collaborated with other research scientists, designers, and product managers in Adobe Research, Behance Livestreaming team and Document Cloud team.
-   [C9] Presented research findings at multiple research teams and publish an academic paper in ACM CHI 2020

National Taiwan University, Taipei, Taiwan   **Aug 2009 - Nov 2011**
Research Assistant, Smart Home Group in Intelligent Robot Lab, Advisor: Dr. Li-Chen Fu
-   Led interdisciplinary research on pervasive computing and healthcare systems.
-   Conducted **field observations** (two weeks) in National Taiwan University Hospital to identify key activities and interactions and between medical staff, caregivers, and post-surgery impatiens.
-   Coordinated monthly meetings with other computer scientists, psychologists, and medical staff to inform the results of the **field deployment** of the smart ward system and proposed future research directions.
-   Implemented a situation-aware caring system using ambient sensing data (HMM, SVM, kNN- JAVA, C#).

National Science Council, Taipei, Taiwan   **Nov 2012 – May 2013**
Software Engineer/ Research Scientist, Supervisor: Dr. Greg Lee
Designed, developed, and deployed a collaborative learning platform for beginner programmers. Collaborated with other computer scientists, education experts and high school teachers. Field deployment the learning tool in classrooms.

National Taiwan Normal University, Taipei, Taiwan   **May 2008 – May 2009**
Undergraduate Researcher, Supervisor: Dr. Chiung-Yao Fang
Implemented a vision-based gymnastics move recognition system using temporal templates (e.g., MEI and MHI) and Stochastic Context-Free Grammar. The proposal won the Undergraduate Research Grant in Taiwan.

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

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 *Teaching Assistant*. Graduate-level class leading discussion on the topic of crowdsourcing and mentoring research-oriented term projects with six groups per semester.	*2015, 2017 Spring*
CS 465-User Interaction Design, University of Illinois *Teaching Assistant*, 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

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

Graduate Ambassador of UIUC CS Department

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