Chloe Fan

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(revised Nov 3, 2011)

Education

Ph.D., Human Computer Interaction (3rd year) **2009 - present**
Human–Computer Interaction Institute
Carnegie Mellon University
Advisor: Jodi Forlizzi
NSF Graduate Research Fellowship recipient (2011)

B.A., Media Arts & Sciences, Psychology **2005 - 2009**
Wellesley College
Advisor: Panagiotis Metaxas
Thesis committee: Panagiotis Metaxas, Orit Shaer, David Olsen
GPA 3.59/4.0, Departmental Honors, *cum laude*, Sigma Xi

Research Interests

My research lies in the intersection between self-tracking, behavior change, and visualization. I am interested in how self-tracking tools can support long-term self-monitoring of various health behaviors, focusing specifically on visualizations, behavior change techniques, and rewards. On the side, I am also fascinated with interactive art and light installations and how they mediate new interactions between people and the space they are in.

Publications

Pierce, J., **Fan, C.**, Lomas, D., Marcu, G., & Paulos, E. 2010. Some considerations on the (in)effectiveness of residential energy feedback systems. In Proceedings of DIS Conference on Designing Interactive Systems. Århus, Denmark. DIS '10. ACM Press, New York, NY. (26% acceptance rate)

Shaer, O., Kol, G., Strait, M., **Fan, C.**, Grevet, C., and Elfenbein, S. 2010. G-nome surfer: a tabletop interface for collaborative exploration of genomic data. In Proceedings of the 28th international Conference on Human Factors in Computing Systems (Atlanta, Georgia, USA, April 10 - 15, 2010). CHI '10. ACM, New York, NY, 1427-1436. (22% acceptance rate)

Professional Experience

Nokia Research, Palo Alto, CA **Summer 2011**
Manager: David Racz | Collaborators: Evan Welbourne, Brett Clippingdale
PR3/Simple Context project. Data visualization and UI design/implementation for web and mobile dashboards.

Research Experience

Encouraging outdoor physical activity in seniors **Summer – Fall 2010**
Advisor: Jodi Forlizzi
Generated design opportunities for HCI research to address barriers to outdoor physical activity by older adults. Conducted semi-structured qualitative interviews with 13 older adults to understand the barriers, facilitators, and precipitating events that lead to a change in physical activity behavior. Also did preliminary concept generation and evaluation with 11 seniors.

Design framework for creating technology probes in public spaces **Spring 2010**
Advisor: Jodi Forlizzi (Design Perspectives in HCI, CMU)

Created paper signs and simple sensors to understand how to design probes for public spaces. The design framework focuses on creating intended experiences using environmental or human input to drive interventions in public spaces.

Herb Mobility project **Spring 2010**
Collaborators: Min-Kyung Lee, Yash Vora, YooMi Lee, Jodi Forlizzi, UPitt
Conducted, transcribed, and coded qualitative interviews with people with mobility issues and understanding their daily activities and needs.

The effects of sound on perceptions of robots and their tasks **Fall 2009**
Advisors: Jodi Forlizzi, Sara Kiesler (Applied Research Methods, CMU)
Ran a pilot study looking at how happy and sad background music affected viewers' perceptions of a robotic arm and the task it's performing in a video. Results of the pilot study showed that music did not have a strong effect on robot and task ratings, but the participant's gender, previous robot experience, and current mood did.

WiiPaint: Full-body interaction in a collaborative art application **Summer 2008 – Spring 2009**
Advisors: Panagiotis Metaxas, Orit Shaer, David Olsen (Undergraduate Thesis, Wellesley College)
Explored ways in which full-body interaction can be encouraged in a collaborative art application located in a public space such as a museum. WiiPaint sets the context for interaction and experiments with affordance and mapping of Wii Remotes to the interface.

Investigating MMORPG Networks **Fall 2007**
Advisor: Daniel Bilar (Computer Networks, Wellesley College)
Conducted traffic analysis on Massively Multiplayer Online Role-Playing Games by parsing over 10,000 packet traces from MapleStory and Flyff using WireShark and Emacs.

Color Associations in Video Game Environments **Summer 2007**
Advisor: Steve Harrison (Virginia Tech Summer REU)
Collaborated on an interactive art project with the Digital Arts Research Collaborative (DARC) by researching different emotions and common associations of single colors and color pairs.

Workshops

Informing the Design of Future Urban Landscapes **2010**
Designing Interactive Systems (DIS '10), Århus, Denmark.

Panels

What If Computer Science Was Not "Just" About Technology? (Inter)facing the Future from Academia to Industry **2011**
Panelists: Chloe Fan, Catherine Grevet, Francine Lalooses, Meredith R. Morris, Megan Strait, Consuelo Valdes
Grace Hopper Celebration of Women in Computing (GHC '11), Portland, Oregon.

Scientific Community Involvement

Reviewer
CHI '11-12 | TEI '10, '12 | DIS '10 | UIST '10 | HRI '11 | ITS '11

Student Volunteer
CHI '10 (Photographer), '11 | TEI '10 (Co-Chair), '11 | GHC '11

Volunteer

Women@SCS, Carnegie Mellon University **Spring 2010 – Spring 2011**
Facilitated match-ups of mentorships between graduate and undergraduate women in the School of Computer Science.

Graduate Student Assembly (GSA), Carnegie Mellon University **2010 - 2011**

Co-organized social gatherings as representative for PhD students with MHCI GSA rep to bring together graduate students in the HCII.

Teaching Experience

Teaching Assistant, Wellesley College **Spring 2009**
Introduction to Human-Computer Interaction (Flash & Actionscript).

Tutor, Computer Science, Wellesley College **Fall 2006 – Spring 2009**
Introduction to Java Programming, Data Structures, Multimedia Design & Programming.

Skills

Programming Languages
Java, Python, C++, C#, XAML, ActionScript 3.0, Lingo (Adobe Director)

(Comfortable in *nix environments.)

Web Design & Development
HTML, CSS, JavaScript/jQuery, Django, Java

Graphic Design & 3D Graphics
Adobe: Photoshop, Illustrator, Flash, Director
Autodesk Maya

Data Visualization
Raphaël, Processing, Protovis, Google Charts

Hardware prototyping
Arduino

Statistical Analysis
JMP, SPSS

Machine Learning
Weka

Foreign Languages
English (native), Chinese (Mandarin, conversational), Shanghai Dialect (conversational), French (conversational), Portuguese (beginner), Spanish (beginner)

Musical Instruments
Piano (7 years classically trained), Guitar (self-taught since 2008), Ukulele (self-taught since 2011)