

# Chloe Fan

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(revised May 31, 2011)

## Education

### **Ph.D., Human Computer Interaction (2<sup>nd</sup> 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

I'm interested in studying how people use self-tracking tools to facilitate behavior changes in health and sustainability. I specifically focus on features (e.g. data visualization, rewards) of self-tracking tools that adapt to users' needs over time to keep them engaged in self-reporting.

## 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 seniors. Conducted semi-structured qualitative interviews with 13 elders 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 6 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.

## **Scientific Community Involvement**

### **Reviewer**

TEI '10, '11 | DIS '10 | UIST '10 | HRI '11 | CHI '11

### **Student Volunteer**

TEI '10 (Co-Chair), '11 | CHI '10 (Photographer), '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 HCI.

## **Teaching Experience**

### **Teaching Assistant, Wellesley College**

**Spring 2009**

Introduction to Human-Computer Interaction (Flash & Actionscript).

## **Skills**

### **Programming Languages**

Java, Python, C++, C#, XAML, ActionScript 3.0, Processing, Arduino, Lingo (Director)

(Comfortable in \*nix environments.)

### **Web Design & Development**

HTML, CSS, JavaScript, jQuery, Django

### **Graphic Design & 3D Graphics**

Adobe Photoshop, Adobe Illustrator, Adobe Director, Autodesk Maya

### **Statistical Analysis**

JMP, SPSS

### **Machine Learning**

Weka

### **Foreign Languages**

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

### **Musical Instruments**

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