

# Chloe Fan

Human-Computer Interaction Institute  
Carnegie Mellon University  
5000 Forbes Avenue, Pittsburgh, PA 15213  
chloef@cs.cmu.edu  
<http://www.chloefan.com>

## Education

**Ph.D., Human Computer Interaction (1<sup>st</sup> year)** **2009 - present**  
Carnegie Mellon University  
Advisor: Jodi Forlizzi

**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

Designing technology probes to engage people in public spaces, increase their awareness of the environment and their automatic behaviors, motivate positive behavior change, and encourage exploration of different types of motion or aesthetic qualities of public spaces. Encouraging sustainable behavior using emotive and social interfaces in sustainability design. Improving Human-Robot Interaction and social interfaces through visual, haptic, motion, and auditory feedback.

## Publications

**G-nome Surfer: a Table-Top Interface for Collaborative Exploration of Genomic Data, Wellesley College. Summer 2009 (CHI '10, acceptance rate 22%)**  
*Advisor: Orit Shaer, Collaborators: Catherine Grevet, Megan Strait, Sarah Elfenbein*  
Designed and implemented in C# G-nome Surfer, a genome browser prototype for the Microsoft Surface, by determining biology researchers' workflow combined with novel interaction and collaboration techniques afforded by the Surface.

## Research Experience

**Design framework for creating technology probes in public spaces, CMU. Spring 2010**  
*Advisor: Jodi Forlizzi*  
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, CMU. 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.

**Evaluating the (in)effectiveness of residential energy feedback on behavior change, HCI Process & Theory, CMU. Fall 2009**

*Collaborators: James Pierce, Gabi Marcu, Derek Lomas, Eric Paulos*

Conducted qualitative studies in homes to understand dwellers' energy usage habits, deployed a commercial energy monitor, and followed up with interviews assessing their engagement with the monitor and changes in attitudes or behavior.

**The effects of sound on perceptions of robots and their tasks, Applied Research Methods, CMU. Fall 2009**

*Advisors: Jodi Forlizzi, Sara Kiesler*

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, Undergraduate Thesis, Wellesley College. Summer 2008 - Spring 2009**

*Advisors: Panagiotis Metaxas, Orit Shaer, David Olsen*

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, Computer Networks, Wellesley College. Fall 2007.**

*Advisor: Daniel Bilar*

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, Virginia Tech. Summer 2007**

*Advisor: Steve Harrison*

Collaborated on an interactive art project with Virginia Tech faculty and graduate students by researching different emotions and common associations of single colors and color pairs.

## **Scientific Community Involvement**

**Reviewer**

TEI '10, DIS '10, UIST '10

**Fourth International Conference on Tangible and Embedded Interaction (TEI '10)**

Student Volunteer Co-Chair

**Student volunteer - Photographer**

CHI '10

## **Teaching Experience**

**Teaching Assistant, Wellesley College. Spring 2009**  
Introduction to Human-Computer Interaction.

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

## **Skills**

### **Languages**

HTML, CSS, JavaScript, ActionScript 3.0, Processing, Arduino, Lingo (Director), Java, C++, C#, XAML

### **Software**

Adobe Creative Suite, Adobe Director, Autodesk Maya

### **Foreign languages**

Chinese (Mandarin, conversational), Shanghai Dialect (conversational), French (intermediate)