

# How-To Track: Developing persuasive technology applications

## 1. Using Social Media for Healthy Behavior Change

Kendra Markle, Stanford Persuasive Technology Lab

Learn to design, build and pilot social media prototypes that encourage healthy behaviors. We'll cover a rapid prototyping process to generate and test many ideas quickly, and show you how to cultivate and build on the ones that show promise. We'll talk about different types of social media, which intrinsic and extrinsic motivators they lend themselves to and discuss a number of prototypes that have been recently piloted on and with Stanford University students. Many health behaviors are contagious, including over-eating. Our friends of friends of friends have a bigger impact on our health than we realize. Social media is a new pervasive distribution channel for deliberate social influence and behavior change. We look to early adopters of this new technology to help us understand and create the future of social media used for health.

Come with your own social media persuasion ideas that you'd like to develop or with other projects that you'd like to add persuasive social media components to. This will be an interactive workshop to practice the concepts we cover.

## 2. Design with Intent: Using design patterns to develop new persuasive technology applications

Dan Lockton, *Brunel University, London*

All design and technology influences our behavior, but as designers we don't always consciously consider the power this gives us to help people. There's a huge opportunity for persuasive technology and design for behavior change to address social, healthcare and environmental issues, but as yet little in the way of a guide for designers (and other stakeholders), bringing together knowledge from different disciplines, and drawing parallels which can allow concepts to be transposed.

The Design with Intent toolkit aims to address this gap, presenting a wide range of techniques and examples from different psychological and design disciplines in the form of design patterns (or 'gambits') applicable to many analogous behavior change situations, to inspire the development of new concepts and applications. The toolkit itself has been developed through a series of iterative workshop sessions with designers and students, applying the ideas to a range of behavior change problems. The form of the toolkit is inspired by Jenifer Tidwell, Christian Crumlish and Erin Malone's work on design patterns for interfaces and social interfaces, translated into the form of IDEO-style 'method cards'. Have a look, and download the cards:

<http://designwithintent.co.uk>

Bring your own ideas (and problems) and see if the group can help develop and address them! The fast-moving two-hour workshop will comprise:

An introduction to how design influences behavior and an explanation of the toolkit

Participants explaining their behavior change problems to the group

A rapid group exercise to uncover some of the different mental models participants have of the 'users' they're trying to influence

Group idea generation and rapid development exercises, applying the toolkit to the problems brought by participants

Brief presentations, and group discussion of the ideas

## 3. Using the Fogg Behavior Model, Behavior Grid and Behavior Wizard for Persuasion

Jason Hreha and Kendra Markle, Stanford Persuasive Technology Lab

This workshop will cover BJ Fogg's three tools for understanding behavior in depth, including the behavior wizard, which just launched in May, 2010. We'll show you how to use ability, motivation and triggers to

increase or decrease the likelihood that a behavior will occur and how to understand and target different types of behaviors. We'll cover which types of technology work well for each type of behavior and how some behavior changes are best achieved with a progression of behavior change targets. We'll do exercises at each step of the way so everyone will get a chance to try concepts out on their own projects and get feedback from others. You can preview the tools at [behaviormodel.org](http://behaviormodel.org), [behaviorgrid.org](http://behaviorgrid.org) and [behaviorwizard.org](http://behaviorwizard.org).

## **Discussion Track: Persuasive technology trends & futures**

### **1. Persuasion profiling: adaptive persuasive systems and stable individual differences**

Maurits Kaptein and Dean Eckles

This informal session is about individual differences in persuasion processes and how current and future systems do and will adapt to these individual differences. The organizers will briefly present some ongoing empirical research on modeling individual differences in responses to influence strategies. Most of this workshop will be an opportunity to discuss any of the following (as guided by participants' interests and expertise):

- Varied approaches to studying individual differences
- The consistency of individual differences in persuasion over time and across domains
- Influence strategies as a level of analysis
- The consequences of new sources of disaggregate data
- Data ownership, standardization, and regulation
- Statistical models of individual differences
- Practical challenges in the application of research in this area
- Other topics raised by participants

### **2. Workshop on Ethics of Persuasive Technology: Envisioning Systemic Impacts**

Janet Davis, Dept. of Computer Science, Grinnell College

This hands-on workshop will explore the application of Envisioning Cards to imagine systemic outcomes of persuasive technology use, as a possible tool to help designers address ethical issues.

In 1999, Berdichevsky and Neuenschwander included as one of their ethical principles for persuasive technology design, "The creators of a persuasive technology must consider, contend with, and assume responsibility for all reasonably predictable outcomes of its use" [2]. Few would disagree with this principle. Yet, what is "reasonably predictable"? What tools and methods can support designers in making such predictions?

In this workshop, I propose to explore the application of Envisioning Cards [4, 5] to persuasive technology. The Envisioning Cards are being developed at the Value Sensitive Design Research Laboratory at the University of Washington to help designers think about new technologies in the context of long-term, systemic problems. The cards embody concepts along four key dimensions: stakeholders, values, pervasiveness, and time. Each card portrays a systemic concern, such as the Long Now, Indirect Stakeholders, and Non-targeted Use, and suggests a specific question or brief activity to help designers consider their project in the context of that concern.

More info (in attached PDF)

### **3. New methods and data sources for persuasive technology research**

Dean Eckles, Stanford Persuasive Technology Lab

This session is an informal discussion of new opportunities and challenges in studying persuasion and interactive technologies presented by new sources of data and new research methods. The exact topics are very much up to the participants. Possible topics include:

- Incorporating location data collection into study design and analysis
- Disaggregate behavioral data from use of Web services
- Social network data and studies of social influence
- APIs and other tools for using existing services in research
- "Big data" and persuasive technology research