

UNIVERSITY OF WATERLOO
School of Computer Science

CS886

Persuasive Technologies

Winter 2010

Using the course website

The course webpage is available at:

http://www.cs.uwaterloo.ca/~cdimarco/cs886_persuasive.html

Overview

Persuasive technology has recently emerged as a new discipline, with the potential to affect all aspects of the way in which people interact with computers. In this course, we will look at the variety of ways in which persuasion occurs in computer systems, from the implicit effects in social media, to explicit use in applications like mobile services for healthcare delivery and persuasive games. This course is intended for anyone who is interested in gaining an in-depth understanding of persuasive technologies, both its theories and applications, and who is curious about the social and technical implications of this new field.

Participants should be willing to read widely and fairly deeply on a weekly basis. One-page position papers (credit/non-credit) will be assigned to provide opportunity for writing practice and creative thinking. There are no formal prerequisites other than interest in the topic and ability to read and analyze technical material. Grading will be based on weekly one-page position papers (20%); a class presentation and participation (30%); and participation in a class project (50%).

Course project

In the class project we will use the Virtual Human Toolkit from the University of Southern California's Institute for Creative Technologies (<http://vhToolkit.ict.usc.edu>) to create a virtual automated personalized health coach. The project will involve a variety of skills and expertise. Students can choose to focus on particular aspects, including: user modelling; creating models of health rhetoric and persuasion; designing and implementing natural language and multimedia software tools; and more.

Schedule of topics

The course meets in the AI Lab conference room (DC2306C) Tuesdays 2:00–5:00.

Organizational Meeting

- Tuesday January 12 2:00–5:00 DC2306C.
- Readings (for optional fun):
 - Jay Heinrichs, *Thank you for arguing: What Aristotle, Lincoln, and Homer Simpson can teach us about the art of persuasion*, Three Rivers Press, 2007. DC Library Short-term loan call number: UWD 1463

Session 1: The Nature of Persuasion

- Tuesday January 12.
- Readings:
 - B.J. Fogg, *Persuasive technology: Using computers to change what we think and do*, Morgan Kaufmann Publishers, 2003. Chapters 1 (Overview of Captology) and 3 (Computers as Persuasive Tools). DC Library Short-term loan call number: UWD 1478

Sessions 2 and 3: Models of Rhetoric and Persuasion

- Tuesday January 26 and Wednesday January 27.
- Readings:
 - William M. Keith and Christian O. Lundberg, *Essential guide to rhetoric*, Bedford/St. Martin's, 2008. Skim all (a short book). DC Library Short-term loan call number: UWD 1493
 - J.P. Dillard and M.W. Pfau (eds.), *The persuasion handbook: Developments in theory and practice*, Sage Publications, 2002. Chapter 16 (Persuasion and the study of affect). DC Library Short-term loan call number: UWD 1461

Sessions 4 to 6: Personalization and Adaptive Technologies

- Tuesdays February 2, 9, 23.
- Readings:
 - Peter Brusilovsky, Alfred Kobsa, and Wolfgang Nejdl (eds.), *The Adaptive Web: Methods and strategies of Web personalization*, Springer, 2007. Chapters 6 (skim) (User models for adaptive hypermedia) and 15 (Adaptive information for consumers of health-care). Selected articles on personalized healthcare information. DC Library Short-term loan call number: UWD 1499

Sessions 7 and 8: Mobile Persuasion

- Tuesdays March 2 and 9.
- Readings:
 - B.J. Fogg et al., *Mobile persuasion: 20 perspectives of the future of behavior change*, Stanford Captology Media, 2007. Selected chapters on mobile health persuasion. DC Library Short-term loan call number: UWD 1501

Sessions 9 and 10: Persuasion and Social Media

- Tuesday March 30 and Wednesday March 31.
- Readings:
 - B.J. Fogg, Telelecture on persuasion and social media from: *The psychology of Facebook*. (not released yet).
 - Ian Bogost, *Persuasive games: The expressive power of videogames*, The MIT Press, 2007. Chapters 1 (Procedural Rhetoric) and 11 (Purposes of Persuasion) DC Library call number: UWD 1502
From amazon.com: “Bogost argues that videogames, thanks to their basic representational mode of procedurality (rule-based representations and interactions), open a new domain for persuasion; they realize a new form of rhetoric. Bogost calls this new form ‘procedural rhetoric’, a type of rhetoric tied to the core affordances of computers: running processes and executing rule-based symbolic manipulation. He argues further that videogames have a unique persuasive power that goes beyond other forms of computational persuasion. Not only can videogames support existing social and cultural positions, but they can also disrupt and change those positions, leading to potentially significant long-term social change.”