

Department of Computer Science
University of Houston

**FACULTY CANDIDATE SEMINAR
SPRING 2011**

WHEN: MONDAY, APRIL 4, 2011
WHERE: PGH 232
TIME: 11:00 AM

SPEAKER: Dr. Steven Dow, Stanford University

Host: Dr. Ioannis Pavlidis

TITLE: How Prototyping Practices Affect Design Results

Abstract:

To produce better information systems and services, we need a deeper understanding of how and why prototyping practices affect design results. My research empirically examines the creative process and design outcomes. I will describe experiments on iteration and comparison, two key principles for discovering contextual design variables and their interrelationships. We found that, even under tight time constraints when the common intuition is to stop iterating and start refining, iterative prototyping helps designers learn. Our results also indicate that creating and receiving feedback on multiple prototypes in parallel—as opposed to serially—leads to more divergent ideation, more explicit comparison, less investment in a single concept, and better overall design performance. Most recently, we found that groups who produce and share multiple prototypes report a greater increase in rapport, exchange more verbal information, share more features, and reach a better consensus.

Bio:

Steven Dow is a Postdoctoral Scholar in the HCI Group at Stanford University where he researches human-computer interaction, creative problem-solving, prototyping practices, and "crowdsourcing" methods. He is recipient of Stanford's Postdoctoral Research Award and co-recipient of a Hasso Plattner Design Thinking Research Grant. He received an MS and PhD in Human-Centered Computing from the Georgia Institute of Technology, and a BS in Industrial Engineering from University of Iowa. <http://www.stanford.edu/~spdow/>