IS Department Seminar

Understanding and Mitigating Information Overload—From Personal to Ubiquitous Computing

Steve Voida, PhD
Department of Communications, Cornell University
svoida@cornell.edu

DATE: Tuesday, February 12, 2013
COFFEE: 12:45-1:00
TIME: 1:00-2:00
LOCATION: GITC 1402

ABSTRACT
As the ubiquitous computing visions of “computation everywhere” have become a reality, it is now possible for people to both produce and consume more electronic information in more places, as part of more activities, and in more social contexts than ever before. These technologies dramatically augment human cognitive capabilities. However, with a vast increase in the capture of and exposure to information, there is also a corresponding increase in the amount of extra work needed to keep up with the demands of perceiving, sense-making, organizing, utilizing, and managing that information over the long term. This is the crux of the information overload problem. In my talk, I will present research exemplifying an end-to-end approach to understanding and mitigating information overload. First, I will present research illustrating how the design and evaluation of novel interfaces and infrastructures can enable knowledge workers to better respond to information overload, allowing them to manage information in ways that are more closely matched to how they conceive of, organize, and collaborate around their day-to-day activities. This research challenges the decades-old interaction metaphors and infrastructures that silo and de-contextualize...
our data and are no longer sufficient for managing increasingly large amounts of personal information. Second, I will present a mixed-methods study of the information management practices in one organization. In this research, I collected empirical evidence about the mental, social, and physiological effects of information overload, focusing specifically on the extent to which email served as a source of interruptions, anxiety, and stress. In my current and future work, I am examining ways that ubiquitous computing technologies, such as smartphones with extensive sensing capabilities and near-continuous connectivity, contribute to the problem of information overload as well as how they might be harnessed through interface and infrastructure design to become part of the solution.

**BIO**

Stephen Voida is a postdoctoral associate in the Cornell University Department of Information Science, where he studies personal information management, pervasive healthcare, and ubiquitous computing as a member of the Interaction Design and People-Aware Computing laboratories. His work was nominated for best paper awards at CSCW 2008 and CHI 2012 and has been supported by the National Science Foundation, Google, and a CCC/CRA Computing Innovation postdoctoral fellowship. His research has appeared in the *New York Times*, the *Wall Street Journal*, *The Atlantic*, *Lifehacker.com*, and on the *APM Marketplace Tech Report*. He earned his doctorate and master’s degrees in computer science and human–computer interaction, respectively, from the Georgia Institute of Technology and his bachelor’s degree in computer science from Arizona State University.

**Distance Participation**

Topic: Steve Voida - 2013-02-12  
Date: Tuesday, February 12, 2013  
Time: 1:00 pm, Eastern Standard Time (New York, GMT-05:00)  
Meeting Number: 646 477 427  
Meeting Password: (This meeting does not require a password.)

To join the online meeting (Now from mobile devices!)

2. If requested, enter your name and email address.  
3. If a password is required, enter the meeting password: (This meeting does not require a password.)  
4. Click "Join".  

To view in other time zones or languages, please click the link:  

For assistance
1. Go to https://njit.webex.com/njit/mc
2. On the left navigation bar, click "Support".