Supporting Reappropriation of Information
Moushumi Sharmin
Ph.D. Candidate
Department of Computer Science
University of Illinois at Urbana-Champaign
Email: sharmin2@illinois.edu
http://web.engr.illinois.edu/~sharmin2/

DATE: February 20, 2013
COFFEE: 2:15-2:30
TIME: 2:30-3:30
LOCATION: GITC 1402

ABSTRACT
Natural User Interface technologies such as gesture and voice recognition are offering rich new possibilities for our everyday computing experiences. More than simply intuitive forms of interaction these technologies can provide ways to transform behavioral practices in particular contexts. Within these contexts, there are important challenges in how we take the opportunities provided by NUIs and design them in ways that are attuned to the demands and circumstances of a particular setting. In this talk I will explore these issues in the context of the particular setting of the operating room. I will present a Kinect-based system that uses gesture and voice recognition capabilities to enable clinicians to interact with images during surgery without compromising sterility. I will discuss the iterative design and development of the system moving from our initial understandings, through to a fully working system that is being used in real surgical procedures. Finally I will consider how these systems are being used in practice. Drawing on fieldwork of the system in use, I will highlight how the system offers more that intuitive interaction by creating rich new possibilities for the interpretive and communicative work taking place with these images during surgery.

BIO
Moushumi Sharmin is a Ph.D. candidate in the CS department at the University of Illinois at Urbana-Champaign working in the area of Human-Computer Interaction, Intelligent Information Management and Retrieval, and Visualization of Information. She is also interested in Large-Scale Social Network analysis and Collaboration pattern in these networks. She (co-)authored 20+ journal and conference papers that appeared in the top ACM and IEEE venues in the areas of Human Computer Interaction, Ubiquitous and Mobile Computing. According to Google Scholar her publications have been cited 300+ times. She also has a US patent on in-context display of presentation search results with her colleagues in IBM T.J. Watson Research Center. She served as a member of 20+ program or review committees for all top conferences such as SIGCHI, CSCW, Creativity and Cognition, PerCom, UbiComp, and Interact. She is a fellow of the American Association of University Women, a finalist of Google Anita Borg Scholarship, and a recipient of the Saburo Muroga Fellowship.