

Department of Computer Science  
University of Houston

**FACULTY CANDIDATE SEMINAR  
SPRING 2011**

**WHEN:** MONDAY, MARCH 28, 2011  
**WHERE:** PGH 232  
**TIME:** 11:00 AM

**SPEAKER:** Dr. Xiaojun Bi, University of Toronto

Host: Dr. Zhigang Deng

**TITLE:** Human-Computer Interaction with Post-PC Computing Devices

**Abstract:**

We are stepping into a Post-PC computing era in which computing activities become heterogeneous in both input and output channels. However, the user interfaces we currently use are not much different from the original GUI developed in the early 1970s. In this talk, I will introduce my research about applying a user-centered approach to develop interfaces that move significantly beyond this status-quo. In particular, I have designed and implemented a set of novel interaction techniques for managing windows on a large display based on the understanding of how large displays affect users' behaviors and performance in desktop computing. These new techniques are coherently integrated with traditional window management operations on a large-display-oriented window management system prototype, called WallTop. Usability tests show that users can quickly and easily learn the new techniques and apply them to realistic window management tasks with increased efficiency. In addition to the research about large displays, I have explored integrating multi-touch surfaces into desktop computing environments, and investigated issues relevant to text entry on touch screen devices.

**Biography:**

Xiaojun Bi is a PhD candidate in the Department of Computer Science at the University of Toronto under the supervision of Prof. Ravin Balakrishnan. His research lies in Human-Computer Interaction (HCI), with primary interests in human behavior understanding, performance modeling, and interactive system design. In addition to carrying out research at the University of Toronto, Xiaojun Bi has collaborated with researchers at various leading industrial laboratories, including Microsoft Research-Redmond, IBM Research-Almaden, Google Research, and Autodesk Research. He holds a Master's degree in Computer Science from Tsinghua University (Beijing) and a Bachelor's degree in Automation from the same university.

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