Princeton University
Department of Electrical Engineering
Information Sciences and Systems (ISS) Seminar

Speaker: Ramon Caceres, IBM Research
Date: Monday, March 26, 2007
Time: 11:00am
Room: F006 – Friend Center
Title: Personalized and Trustworthy Mobile Computing

Abstract:
The ability to walk up to any computer, personalize it, and use it as one's own has long been a goal of mobile computing research. In this talk, I will present a solution based on carrying an auto-configuring operating system along with a suspended virtual machine on a personal mobile device. With this approach, a host computer boots from the device and resumes the virtual machine. The user thus regains access to her personal environment, including previously running computations. To establish trust on the host computer before giving it access to the virtual machine or to any other personal information, the device leverages trusted computing hardware on the host to determine the identity and integrity of all software loaded on the host. We have implemented these ideas and shown them to work on commodity hardware.

Bio:
Ramon Caceres is a research staff member at IBM Research. His current work focuses on pervasive computing and secure systems. Prior to joining IBM, he was chief scientist of Vindigo, an award-winning provider of mobile applications. Earlier, he was a research scientist at AT&T Labs, where he concentrated on wireless networking and network measurement. He holds a Ph.D. from the University of California at Berkeley.