Talk Title: Vis-a-Vis: Online Social Networking via Virtual Individual Servers

Speaker: Ramon Caceres

Affiliation: AT&T Labs - Research

Venue: St. Pats Ballroom B

Time: Jan' 23rd Friday, 9:30 to 10:30am

Abstract:

Online social networks (OSNs) are immensely popular, but they raise important privacy concerns because they concentrate personal information for many users under a single administrative domain. We present Vis-a-Vis, a privacy-preserving framework for OSNs in which each person maintains her own information in her own Virtual Individual Server (VIS), a personal virtual machine running in the cloud. VISs self-organize into overlay networks, one per social group with which VIS owners wish to share information. Vis-a-Vis uses distributed hash tables to provide efficient and scalable operations on a wide variety of OSN groups. Our decentralized approach makes large-scale privacy breaches much less likely than in centralized architectures, and gives people fine control over what information they share with whom.

This is joint work with Landon Cox, Harold Lim, and Amre Shakimov from Duke University.

Bio:

Ramon Caceres is a Lead Member of Technical Staff at AT&T Labs. His research interests include mobile, pervasive, and ubiquitous computing; wireless networking; virtualization; and security. He has previously been a Research Staff Member at IBM Research and Chief Scientist of Vindigo, an award-winning provider of location-based services for mobile devices. He holds a Ph.D. from the University of California at Berkeley and is an ACM Distinguished Scientist. He was born and raised in Dominican Republic.