COMPUTER SCIENCE SEMINAR

Surveying The Landscape Of Threats Facing Users In The Social Web

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Abstract: The World Wide Web is rapidly evolving into a "social Web" that is dominated by user-generated content and user-centric social interactions. Although this evolution enhances the usability of the Web, it also presents a number of information security and privacy challenges. Some of these challenges are familiar such as malware and spam, while others are new and unique to the social Web such as fraudulent user profiles. In this talk, we survey the landscape of threats facing users in the social Web, and we explore interesting research challenges that arise when countering these threats. The threats facing social Web users can be broadly categorized into three distinct classes: traditional attacks, socially enhanced attacks, and social Web-specific attacks. In the talk, we will discuss each of these attack classes and examine numerous examples that have been observed over the past few years. These examples are real-world incidents that have already affected specific social Web environments (e.g., MySpace, Facebook, etc.), highlighting the practical importance of these attacks and their impact on millions of social Web users. We will also investigate various countermeasures for these threats and discuss important research questions that remain unanswered.

Bio:

Dr. Steve Webb is a research scientist at Purewire, Inc. and the chief architect of PurewireTrust.org, a free online portal that maintains portable reputations for people, places, and things. Dr. Webb has 10 years of experience in researching security threats that target information systems such as P2P networks, email systems, the World Wide Web, and social networking environments. He holds a Ph.D. in Computer Science from the Georgia Institute of Technology, where he published more than a dozen academic articles on various information security and privacy issues, including spam, phishing, and information warfare.

Thursday, April 16, 2009, 10:00 am Mathematics and Science Center: W302

MATHEMATICS AND COMPUTER SCIENCE EMORY UNIVERSITY