Empowering Users to Make Privacy Decisions in Mobile Environments

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Keynote Abstract

Mobile platforms have enabled third-party app ecosystems that provide users with an endless supply of rich content. At the same time, mobile devices present very serious privacy risks: their ability to capture real-time data about our behaviors and preferences has created a marketplace for user data that most consumers are simply unaware of. In this talk, I will present prior and ongoing research that my group has performed to understand how users make privacy decisions on their mobile devices, including work that we have done to improve the usability of the permission-granting process through the use of machine learning. I will also present research that my research group has conducted to automatically examine the privacy behaviors of mobile apps. Using analysis tools that we developed, we have tested over 100,000 of the most popular Android apps to examine what data they access and with whom they share it. I will present data on how mobile apps are tracking and profiling users, how these practices are often against users' expectations and public disclosures, and how app developers may be violating various privacy regulations.

Biography

Serge Egelman is the Research Director of the Usable Security and Privacy group at the International Computer Science Institute (ICSI), which is an independent research institute affiliated with the University of California, Berkeley. He conducts research to help people make more informed online privacy and security decisions, and is generally interested in consumer protection. This has included improvements to web browser security warnings, authentication on social networking websites, and most recently, privacy on mobile devices. Seven of his research publications have received awards at the ACM CHI conference, which is the top venue for human-computer interaction research; his research on privacy on mobile platforms has been cited in numerous lawsuits and regulatory actions. He received his PhD from Carnegie Mellon University.