Current Topics in Privacy Seminar

Peter Story
Clark University

Title:
Defending Messaging Apps Against Spyware Using Data Diodes

Abstract:
Messaging apps like Signal, WhatsApp, and iMessage use end-to-end encryption to protect users' messages against passive government surveillance. However, these apps offer limited protection against targeted attacks: if a user's device is compromised by spyware, the attacker will gain access to all the user's messages. I will explain how one-way network devices, known as data diodes, can harden messaging apps against spyware. We anticipate this technology will be valuable to journalists, politicians, and other targets of spyware.

Bio:
Dr. Peter Story is an assistant professor of Computer Science at Clark University in Worcester, MA. He researches usable security and privacy. As digital technologies become ever more intertwined with our lives, security and privacy have never been more important. People can protect themselves from digital threats by using protective technologies, such as secure mobile payment systems like Apple Pay and privacy tools like Tor Browser. However, protective technologies will not be widely adopted if they are misunderstood or difficult to use. Peter's research involves studying the strengths and weaknesses of protective tools, studying people's perceptions of these tools, and developing new protective technologies. Peter holds a PhD in Societal Computing from Carnegie Mellon University, and a Bachelor of Science in Computer Science from Gordon College.