

## Peer-to-Peer Privacy in Social and Communications Applications

Camille Cobb

### **Abstract:**

Many people use social and communications applications including Facebook, Instagram, WhatsApp, Tinder, and others. What potentially private information do users routinely expose to friends, family, coworkers, and even strangers? This talk focus on the privacy risks and concerns arising from information that apps freely expose between typical users. I refer to this as “peer-to-peer (P2P) privacy.”

First, I will discuss P2P privacy in online dating. Although dating profiles are typically shown to complete strangers, many users have expectations of who will *actually* see their profile and/or how the information will be used. For instance, is it ok to look someone up before a date, and what are the limits of this search?

Online status indicators (i.e., visual UI to communicate when a user is actively online) passively reveal information about a user’s actions and attention, which can raise P2P privacy concerns. For example, if Alice ends a conversation by saying she is going to sleep, she might worry about the assumptions her friend will make if they see her online later that night. I will present the results of a recent research study that characterizes online status indicator design patterns across 40 apps and explores how users are affected by these indicators.

Finally, I will discuss two ongoing projects examining how P2P privacy is portrayed on television and exploring how “would you rather” scenarios can be used to elicit security and privacy tradeoffs that are particularly salient to users.

### **Bio:**

Camille Cobb is a PhD candidate at the University of Washington in Seattle. She works in the Security and Privacy Research Lab and is advised by Yoshi Kohno and Alexis Hiniker. Camille received an NSF Graduate Research Fellowship in 2014. Her security and privacy work has also been supported by the UW Tech Policy Lab. Camille has an MS in Computer Science & Engineering and Bachelors degrees in Physics and Computer Science.