

# "The Influence of Friends and Experts on Privacy Decision Making in IoT Scenarios"

Presented by Pardis Emami-Naeini, CMU

## **Abstract:**

As increasingly many Internet-of-Things (IoT) devices collect personal data, users face more privacy decisions. Personal privacy assistants can provide social cues and help users make informed decisions by presenting information about how others have decided in similar cases. To better understand which social cues are relevant and whose recommendations users are more likely to follow, we presented 1000 online participants with nine IoT data-collection scenarios. Some participants were told the percentage of experts or friends who allowed data collection in each scenario, while other participants were provided no social cue. At the conclusion of each scenario, participants were asked whether they would allow the described data collection. Our results help explain under what circumstances users are more or less likely to be swayed by the reported behavior of others in similar scenarios. For example, our results indicate that when friends denied data collection, our participants were more influenced than when friends allowed data collection. On the other hand, participants were more influenced by experts when they allowed data collection. We also observed that influence could get stronger or wear off when participants were exposed to a sequence of scenarios. For example, when experts and friends repeatedly allowed data collection in scenarios with clear risk or denied it in scenarios with clear benefits, participants were less likely to be influenced by them in subsequent scenarios.

## **Bio:**

Pardis Emami-Naeini is a 4th year PhD student in Societal Computing at Carnegie Mellon University (CMU). She holds a Master of Science degree in Societal Computing from CMU and a Bachelor of Science degree in Computer Engineering from Sharif University of Technology, Iran. Her research interests include investigating the impact of privacy and security in the Internet of Things (IoT) world by applying statistical learning methods as well as conducting user studies.

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