A Privacy-Compliant Framework for Mobile and Smart Applications

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- With the rapid growth in technologies such as Internet of Things (IoT) devices and mobile applications, the needs for protecting privacy of individuals and developing applications that are consistent with their own privacy policies and existing privacy-related regulations have become more emergent. In this talk, recent efforts in tackling these challenges and bridging the gap between privacy concerns and the existing software and privacy engineering approaches will be described.

- Methodology, algorithms and tool to identify, extract, model and incorporate privacy and legal requirements in the early phase of software development lifecycle will be discussed, followed by the implementation phase of software development lifecycle and presentation of automated approaches for analysis and shortening the privacy policies and for extracting sensitive statements from privacy policies. This approach helps providing more concise notices to the user.

- Initial steps towards developing a recommender system which translates permission functionalities of Android applications into a set of privacy statements will be discussed.

Sepideh Ghanavati is an assistant professor in Computer Science at the University of Maine. She is also the director of the Privacy Engineering - Regulatory Compliance Lab (PERC_Lab). Her research interests are in the areas of information privacy and security, software engineering, machine learning and the Internet of Things (IoT). Previously, she worked as an assistant professor at Texas Tech University, visiting assistant professor at Radboud University in Nijmegen, the Netherlands and as a visiting faculty at the Institute for Software Research at Carnegie Mellon University. She was a Marie Curie-AFR postdoctoral researcher at the Luxembourg Institute of Science and Technology from 2014 – 2015 and a visiting researcher at the Software Engineering Unit at Fondazione Bruno Kessler (FBK), IRST in Trento, Italy under an NSERC grant in 2010. She got her PhD in Computer Science from the University of Ottawa. She has more than 10 years of academic and industry experience in the area of privacy and regulatory compliance especially in the healthcare domain and has published more than 25 peer-reviewed publications. Recently, she was the recipient of Google Faculty Research award.