



Faculty Candidate Seminar

Regulatory Compliance Software Engineering

Aaron Massey, Georgia Institute of Technology

Thursday, February 12, 2015 11:00 to 12:00pm

Venue: Toomey 251

(Refreshments will be served at 10:45 a.m.)

Abstract - Legal compliance is one of the most important and challenging problems in software engineering. Laws, regulations, and organizational policies codify societal values that software engineers must build into regulated systems. Methods, tools, and techniques for evaluating, establishing, or demonstrating regulatory compliance in software systems are critical for this effort. This relatively young area of research is known as Regulatory Compliance Software Engineering (RCSE).

This presentation examines RCSE research in two domains: Healthcare and Privacy Policies. I will begin by providing an overview of both a method for evaluating software requirements for compliance, including case studies of how people actually make legal implementation readiness decisions for healthcare requirements. I will also discuss how people interpret ambiguities in legal text and the implications of these ambiguities for software engineering. In the second domain, I will present a study identifying software requirements in a set of over 2,000 privacy policies using topic modeling. The results of this work demonstrate the promise of natural language processing approaches to regulatory compliance software engineering.

Bio - Aaron Massey is a Postdoctoral Fellow at Georgia Tech's School of Interactive Computing and the Associate Director of ThePrivacyPlace.org. His research interests include computer security, privacy, and regulatory compliance software engineering. Aaron is a recipient of the Walter H. Wilkinson Graduate Research Ethics Fellowship and a recipient of a Google Policy Fellowship. Aaron earned a PhD and MS in Computer Science from North Carolina State University and a BS in Computer Engineering from Purdue University. He is a member of the ACM, IEEE, IAPP, and the USACM Public Policy Council.