Abstract
The notion of having 3rd party software and 3rd party assessors of that software is not novel. What is becoming more main-stream is the desire for a large quantity of current and future mobile app software to be malware-free. The question then becomes how likely is it that malware can be detected by 3rd party groups or individuals. This talk will discuss at a high level one approach to the problem based on a real military smartphone project for DARPA, and then we conclude if time permits to discuss malware genealogy and composability / interoperability issues that are core to the cyber security dilemma we face. A few other topics that might be addressed in the Q&A portion of the talk include 2 of the 13 grand challenges in software engineering research and practice.

About the Speaker
Jeffrey Voas is a computer scientist at the US National Institute of Standards and Technology (NIST) in Gaithersburg, MD. Before joining NIST, Voas was an entrepreneur and co-founded Cigital. He has served as the IEEE Reliability Society President (2003-2005, 2009-2010), served as an IEEE Director (2011-2012) and currently he is VP of Operations of IEEE Technology Management Council. Voas co-authored two John Wiley books (Software Assessment: Reliability, Safety, and Testability [1995] and Software Fault Injection: Inoculating Software Against Errors [1998]), is currently an Associate Editor-In-Chief of IEEE’s IT Professional Magazine, is on the editorial board of IEEE Computer Magazine, and is on the Editorial Advisory Board of IEEE Spectrum Magazine. Voas received his undergraduate degree in computer engineering from Tulane University (1985), and received his M.S. and Ph.D. in computer science from the College of William and Mary (1986, 1990 respectively). Voas is a Fellow of the IEEE, Fellow of IET, and Fellow of the AAAS. Voas’s current research interests include vetting mobile app software, how apps depend on clouds, software certification ethics, and Internet of Things (IOT). Voas is also an Adjunct Chair Professor of Computer Science at the National Chiao Tung University in Hsinchu, Taiwan.