Spring 2016 Distinguished Speaker Series

LOCALITY AS A DETECTION APPROACH TO INSIDER THREAT BEHAVIOR

FRIDAY JANUARY 15, 2016
1X:00 AM – HEC XXX

This talk starts with an overview of Insider threat, focusing on the impacts and challenges of their malicious behavior, as illustrated by chosen examples. The talk then introduces the concept of locality as a quantifiable value. Violations of Locality applies to detection of insider threat through several characteristics of their behavior: timing of activity, internal and external contacts contacted, volume of information, and information accessed. Some representative examples of how locality would apply to detection at the enterprise level are presented, including cases where locality was used to identify the insider. The talk concludes with discussions of the limitations of this approach as a generic solution to the insider threat problem.

DR. TIMOTHY J. SHIMEALL
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Timothy J. Shimeall received the Ph.D. degree in Information and Computer Science from the University of California, Irvine, in March 1989. From 1988 through 1999, he served as an Associate Professor at the Naval Postgraduate School in Monterey, CA, where he supervised many MS theses and several Ph.D. Dissertations. Since 1999, he has served as a senior member of the technical staff at the Software Engineering Institute, Carnegie Mellon University, Pittsburgh, PA, serving with the CERT Network Situational Awareness Group. He is responsible for the development of methods to support decision making in cyber security at and above the enterprise level, including identification of useful data collection and analysis methods. His work is highly empirical and often involves application of formal methods to practical problems facing cyber security personnel. Dr. Shimeall has also served as an adjunct faculty member of the Heinz College of Carnegie Mellon University, teaching a variety of information security courses and supervising both Masters Theses and capstone projects in that context. Shimeall is the co-author of a recently-published information security textbook: Introduction to Information Security: a Strategic-Based Approach.

Hosted by: Dr. Gary T. Leavens