Cybersecurity Seminar Series presents:

"Achieving cybersecurity using semantic diversity"

By Stuart H. Rubin

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Friday, October 30, 2015 | 2:00 pm
Meet & greet with light refreshments at 1:30
Information Sciences Building, 3rd floor

Information reuse and integration is needed to provide our military forces with information dominance. This implies protecting our ever-more complex software systems from infiltration. This, in turn, requires higher-level compilers to make semantic diversity cost effective. This talk will encompass the following topics and provide for a follow-up question-answer session.

- What are the major present approaches to cybersecurity based on diversity?
- What is randomization, how does it apply to cybersecurity, and what is the role of transformation in achieving it?
- Why symbolic heuristics need be acquired and transferred for scalability?
- The Semantic Randomization Theorem (SRT) and its implications
- Why did the AFs KBSE program fail and what needs to be done to make it successful?
- Why the need, and how to make expert systems and expert compilers qualitatively fuzzy?
- Heuristic acquisition for outperforming quantum computing

Dr. Stuart H. Rubin is a senior scientist at the Space and Naval Warfare Systems Center (SSC) in San Diego, code 71730 (Advanced Concepts & Applied Research). He was previously a tenured associate professor of computer science at Central Michigan University (CMU). He received a Ph.D. in Computer and Information Science from Lehigh University in 1988. He was previously an ONT Post-Doctoral Fellow, at NOSC, for three years. He has over 27 Assigned Navy Patents, over 273 Refereed Publications, and received SSC-PAC's Publication of the Year Awards in 2007, 2009, 2010, and 2011. He is a SIRI Fellow and serves in leadership roles in numerous IEEE technical societies.

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