

CMU Lablet Homepage

Submitted by scherlis on Fri, 07/27/2012 - 8:02am

CMU'S SCIENCE OF SECURITY LABELT INITIATIVE

Science of Security



The broad goal of the Science of Security Lablet (SOSL) is to identify scientific principles that can lead to approaches to the development, evaluation, and evolution of secure systems at scale. The focus on scalability derives from a recognition that modern software-intensive systems have more components and a greater diversity of suppliers. The theme of scalability includes two principal areas of focus, which are composability and usability. Projects within the SOSL may address diverse and possibly conflicting technical approaches in order to most

effectively address the overall thematic goals

Progress in many technical areas can contribute to achieving the overall goals. SOSL projects may draw on multiple technical areas in order to make progress. Examples of contributing technical areas include: safe programming languages, binary and source code analysis, data-intensive systems analysis, self-healing and resilient architecture, assured API and framework compliance, socio-technical ecosystems, development environments, trusted computing, specification and verification, concurrent and distributed systems, requirements and policy, usable security and privacy, intrusion and malware detection, dynamic network analysis, model checking, secure coding practice, secure process separation, verification of cyber-physical systems, and others. Projects within the SOSL will also establish, where possible, collaborations with NSA researchers and others in the community.

LEAD PI

[William L. Scherlis](#) is a full Professor in the School of Computer Science at Carnegie Mellon. He is the founding director of CMU's PhD Program in Software Engineering and director of CMU's Institute for Software Research (ISR) in the School of Computer Science. His research relates to software assurance, software analysis, and assured safe concurrency ("speed with safety"). Dr. Scherlis joined the CMU faculty after completing a PhD in Computer Science at Stanford University, a year at the University of Edinburgh (Scotland) as a John Knox Fellow, and an A.B. at Harvard University.



[Science of Security](#)
