Announcing the Final Examination of Jeremy Lanman for the degree of Doctor of Philosophy

Time & Location: July 2, 2010 at 9:00 AM in Partnership II 301
Title: A Governance Reference Model for Service-oriented Architecture-based Common Data Initialization: A Case Study of Military Simulation Federation Systems

Military simulation and command and control federations have become large, complex distributed systems that integrate with a variety of legacy and current simulations, and real command and control systems locally as well as globally. As these systems continue to become increasingly more complex so does the data that initializes them. This increased complexity has introduced a major problem in data initialization coordination which has been handled by many organizations in various ways. Service-oriented architecture (SOA) solutions have been introduced to promote easier data interoperability through the use of standards-based reusable services and common infrastructure. However, current SOA-based solutions do not incorporate formal governance techniques to drive the architecture in providing reliable, consistent, and timely information exchange. This dissertation identifies the need to establish governance for common data initialization service development oversight, presents current research and applicable solutions that address some aspects of SOA-based data service governance, and proposes a governance reference model for development of SOA-based common data initialization services (G-SOA) in military simulation and command and control federations.

Major: Modeling and Simulation

Educational Career:
Bachelor's of Computer Science, BS, 2001, Butler University
Master's of Software Engineering, MS, 2003, Embry-Riddle Aeronautical University

Committee in Charge:
Dr. Michael Proctor, Chair, Industrial Engineering and Management Systems
Dr. Ratan Guha, Electrical Engineering and Computer Science
Dr. Bala Jaganathan, Institute for Simulation and Training
Dr. Peter Kincaid, Institute for Simulation and Training
Dr. Robert Wittman, The MITRE Corporation

Approved for distribution by Dr. Michael Proctor, Committee Chair, on June 14, 2010.

The public is welcome to attend.