Announcing the Final Examination of John Barry for the degree of Master of Science

Time & Location: March 1, 2013 at 10:00 AM in Partnership II 301
Title: Limitations of Micro and Macro Solutions to the Simulation Interoperability Challenge: An Ease Case Study

The objective of this research is to determine if the Executable Architecture Systems Engineering prototype (EASE) has potential benefit to the U.S. Army as a simulation tool to mitigate the challenges of interoperability. Modeling and Simulation (M&S) interoperability issues have plagued the U.S. Army's Simulation domain for over twenty years. Despite the continued advances in the U.S. Military's common simulation architectures, DIS (Distributed Simulation Network), HLA (High Level Architecture), Testing and Training Enabling Architecture (TENA) and the Common Training Instrumentation Architecture (CTIA), the U.S. Army has struggled with simulation interoperability in establishing reproducible LVC integrating architectures. The interoperability challenge of integrating different networks, databases, standards, and interfaces results in the U. S. Army organizations repeatedly spending time and money to create and implement irreproducible LVC integrating architectures to accomplish similar tasks.

The EASE project uses five unique components to provide an easy to use interface to allow M&S users an improved way to configure and execute M&S events while storing the technical design. However, the main drawbacks to EASE are that it is still in the prototype stage and its potential has not been tested and evaluated as a simulation tool.

In order to improve insight into the potential of EASE to reduce the micro as well as macro interoperability, an EASE experiment was conducted. Eleven participants representing ten different organizations across the three M&S Domains were selected to test EASE using a modified Technology Acceptance Model (TAM). Findings, conclusions, and recommendations for future research are presented.

Major: Modeling and Simulation

Educational Career:
Bachelor's of Biology, BS, 1995, James Madison University
Master's of Adult Education, MS, 2009, Kansas State University

Committee in Charge:
Dr. Michael Proctor, Chair, Industrial Engineering & Management Systems (IEMS)
R. Paul Weigand, Institute for Simulation and Training (IST)
Gary Allen, Joint Training Integration and Evaluation Center (JTI EC)

Approved for distribution by Dr. Michael Proctor, Committee Chair, on February 12, 2013.

The public is welcome to attend.