Announcing the Final Examination of Tae Woong Park for the degree of Doctor of Philosophy

Time & Location: April 10, 2015 at 8:30 AM in Engineering 2 310
Title: AN AGILE ROADMAP FOR LIVE, VIRTUAL AND CONSTRUCTIVE-INTEGRATING TRAINING ARCHITECTURE (LVC-ITA): A CASE STUDY USING A COMPONENT BASED INTEGRATED SIMULATION ENGINE

Conducting seamless Live Virtual Constructive (LVC) simulation remains the most challenging issue of Modeling and Simulation (M&S). There is a lack of interoperability, limited reuse and loose integration between the Live, Virtual and/or Constructive assets across multiple Standard Simulation Architectures (SSAs). There have been various theoretical research endeavors about solving these problems but their solutions resulted in complex and inflexible integration, long user-usage time and high cost for LVC simulation.

The goal of this research is to provide an Agile Roadmap for the Live Virtual Constructive-Integrating Training Architecture (LVC-ITA) that will address the above problems and introduce interoperable LVC simulation. Therefore, this research describes how the newest M&S technologies can be utilized for LVC simulation interoperability and integration.

In addition, this research illustrated a case study using an Adaptive distributed parallel Simulation environment for Interoperable and reusable Model (AddSIM) that is a component based integrated simulation engine. The agile roadmap of the LVC-ITA that reflects the lessons learned from the case study will contribute to guide M&S communities to an efficient path to increase interaction of M&S simulation across systems.

Major: Industrial Engineering and Management Systems

Educational Career:
Bachelor's of Weapons Engineering, BS, 2000, Korea Military Academy (KMA)
Master's of Industrial Engineering, MS, 2005, Seoul National University (SNU)
Master's of Modeling and Simulation, MS, 2013, University of Central Florida (UCF)

Committee in Charge:
Gene Lee, Chair, Industrial Engineering and Management Systems
Luis Rabelo, Co-Chair, Industrial Engineering and Management Systems
Ahmad Elshennawy, Industrial Engineering and Management Systems (IEMS)
Peter Kincaid, Institute for Simulation & Training (IST)

Approved for distribution by Gene Lee, Committee Chair, on March 11, 2015.

The public is welcome to attend.