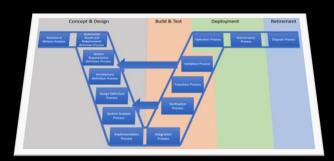
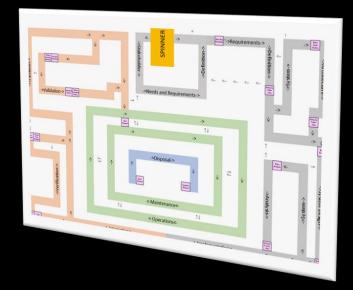
Learning Systems Engineering Through Serious Games

Tuesday Nov 24, 2020 7:00-8:30 P.M. CDT

> A FREE Virtual Event Register On-Line





Contributing INCOSE Chapters





Dr. David Long Assistant Professor, Air Force Institute of Technology (AFIT); Principal Systems Engineer, Centauri, LLC

Brought to you by: Sean Mahrt, HEARTLAND CHAPTER **Program Director**





Learning Systems Engineering Through Serious Games: Many engineers follow a path from an engineering domain such as mechanical or electrical engineering into their careers where they stay comfortably inside those domains. Some of these engineers grow in breadth and work in cross-discipline engineering areas where they begin integrating technical inputs from fields outside their educational domains. The language and responsibilities of systems engineers is different from specialized engineers. This presentation will show some on-going efforts to teach engineers and others about systems engineering through games.

> **Agenda** (Central Time) Tues Nov 24, 2020

Welcome and Announcements 7:00pm CST

- O. Odenigbo / S. Rajkumar, President / V.P., Heartland Chapter
- Sean Mahrt, Program Director, Heartland Chapter
- David Long, President, Wright Brothers Chapter
- B. Bordley / C. Potterveld, Past-President / Treasurer, Michigan Chapter
- D. Menoher / R. Heller, Program Director / Secretary, Three Rivers Chapter
- C. Carson / J. Alexander, President / President-Elect, Great Plains Chapter
- Jack Stein, Asst. Director, INCOSE Americas Sector

Q & A 8:00pm CST **Adjourn** 8:20pm CST

Click Here to:



A FREE Virtual Event [1 PDU]

Visit:

www.incose.org/Heartland

to REGISTER, check for updates, and for more Heartland news and events.



Dr. David Long

Assistant Professor, Air
Force Institute of
Technology (AFIT);
Principal Systems

Engineer, Centauri, LLC

About the Presenter

Dr. David Long is a principal systems engineer for Centauri, LLC and an assistant professor of systems engineering at the Air Force Institute of Technology (AFIT), Wright-Patterson Air Force Base (WPAFB), Dayton, Ohio. His teaching focuses on developing systems engineers to learn about Model Based Systems Engineering (MBSE) and systems thinking. In addition to systems architecting and project management classes, he teaches the course, "Advanced Topics in DoD Systems Engineering." The Advanced Topics course targets mid-career engineers who are moving into systems engineering and chief engineering roles. The course features speakers from engineering domains the students may not have learned about during their time in their primary

engineering domain. The course includes team projects for the engineers to develop a game to help junior engineers learn more about systems engineering – games have included card games to open dialogs between engineers trying to solve problems, variations of Oregon Trail, board games that follow systems engineering process, and more. In addition to the courses he teaches, Dr. Long provides consulting on helping Air Force organizations transition to a digital engineering ecosphere.

Before taking on his current roles, David retired as a colonel from the US Air Force after serving nearly 25 years in various leadership, technical, teaching, maintenance, and acquisition roles. Some of his positions included flight test engineering and management, depot maintenance on KC-135 tanker aircraft, a tour at the Pentagon, teaching systems engineering and systems architecting at AFIT, and leading the Advanced Programs and Plans Division in the Sensors Directorate of the Air Force Research Laboratory. Dr. Long's doctoral research explored systems architecting. He developed a method to use information embedded in system architectures to assess compatibility of sub-systems and their parent systems. His work has been successfully applied in two program offices and extended to include cost implications by one of his master's degree students.

When Dave is not teaching, in his spare time he can often be found supporting STEM initiatives by teaming with local teachers to develop engineering curricula, playing percussion in the Miami Valley Symphony Orchestra, and supporting local theaters as a volunteer board member and photographer. Dr. Long currently serves as President of the INCOSE Wright Brothers Chapter.

A FREE Virtual Event [1 PDU]

7:00 - 8:30pm CT, Tues Nov 24, 2020

Learning Systems Engineering Through Serious Games

Click Here to:

REGISTER