



CHARLESTON, SC LOWCOUNTRY CHAPTER



The Charleston Lowcountry Chapter of INCOSE invites members and guests to attend our virtual meetings.

Join us for networking opportunities and presentations on Systems Engineering.

AUGUST 2020

Thursday, 27 August (16:30)



Schemas and Metamodels and Ontologies, Oh My!



by: Mr. David Long, Vitech Corporation

Presentation:

As organizations apply model-based systems engineering, managing information in a computer model requires a defined data structure. Combined with the ease of modern ontology editors such as OWL or capabilities embedded in many tools, practitioners have begun to develop their own conceptual data models and ontologies. As systems engineers experiment and leverage these capabilities, they cross into the area of language design, often developing custom languages for their projects without the greater depth or consideration necessary to connect enterprise practices. There is a fundamental information model that underpins systems engineering. This information model characterizes the knowledge we must elicit, develop, analyze, and manage in order to successfully engineer systems. It lives implicitly in the process standards that guide our practice, the data item descriptions that define our artifacts, and the representations we use.

The challenge is to move from implicit and explicit, not to advance MBSE but to advance the greater practice of systems engineering. To do so means that we must do more than develop independent data models for projects (the trap of "define and use"). We can leverage decades of practical experience to develop a shared systems metamodel that enables us to effectively communicate, analyze, and reason as we address today's systems challenges. Rather than each project or each organization isolated on an island of their own language, we can and must achieve consistency of data and commonality of practice across the enterprise, across the supply chain, and across the profession.

Speaker:

David is the founder and president of Vitech, where he leads the team in delivering innovative, industry-leading methods and software (CORE™ and GENESYS™) to help organizations engineer next-generation systems. A committed member of the systems community and an Expert Systems Engineering Professional (ESEP), David was the 2014-2015 president of INCOSE.

He is a frequent presenter at industry events worldwide delivering keynotes and tutorials spanning introductory systems engineering, the advanced application of MBSE, and the future of systems engineering. Long holds a bachelor's degree in engineering science and mechanics, as well as a master's degree in systems engineering from Virginia Tech.

Location:

ZOOM

(RSVP to incose.chschapter@gmail.com for details)