



Chapter Meeting

6:00 PM, Tuesday October 13, 2020 www.incose-coa.org

Program: 6 Vs and 3 Ts of Systems Engineering

Abstract:

V may be the favorite letter of systems engineers. V&V (verification and validation) is the fundamental manner by which we confirm that we have delivered the right capability in the right way to address the business need. As we consider the alphabet, T may be our second favorite letter as it is often used to characterize the preferred “shape” of a systems engineer – someone with the required depth in one area and breadth across the technical and management domains necessary to successfully deliver a system.

In transforming our practices through model-based systems engineering (MBSE) and seeking to transform the greater enterprise through digital engineering, V and T become even more important. First, we must understand our heritage – the Vee diagram providing an idealized representation of how we progress through the engineering lifecycle. However, there is far more than one V in the Vee diagram. There is the V as commonly (mis)understood, the V as intended by Forsberg and Mooz, the V as executed in classical design, and the V as realized through traditional integration and test. Understanding those four V’s, we can look to the power of digital transformation and appreciate how the application of MBSE and digital engineering can transform the V and the greater engineering lifecycle to better meet 21st century needs.

But systems engineering is not done by process, method, or tool. Systems engineering is dependent upon the human, and that brings us to the T. First is the T-shaped individual and the competencies necessary to architect and engineer systems. Systems engineering is also dependent upon trust (our second T), a concept of growing importance as we leverage models and adopt MBSE.

What about the third T and the sixth V? They are perhaps the most important of all, and you will have to attend to learn what they are and the critical role they play in our future.

Speaker: David Long



For over 25 years, David Long has focused on helping organizations increase their systems engineering proficiency while simultaneously working to advance the state of the art. 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. He co-authored A Primer for Model-Based Systems Engineering and frequently delivers keynotes and tutorials at industry events around the world. An INCOSE Fellow and Expert Systems Engineering Professional (ESEP), David was the 2014/2015 president of INCOSE.

David holds a bachelor’s degree in Engineering Science and Mechanics, as well as a master’s degree in Systems Engineering from Virginia Tech.



Crossroads of America

Event Schedule (US Eastern Time Zone)

5:00 – 6:00	CoA Board Meeting (Directors & Board Only)
6:00 – 6:15	CoA Chapter Business Meeting (all welcome!)
6:15 – 7:15	Program & Questions
7:15 PM	Adjourn

Business Meeting:

- Call to Order
- Announcements
- Treasurer's Report
- Old Business
- New Business

Remote Access:

Join Zoom Meeting (*Zoom audio is preferred*)

<https://incose-org.zoom.us/j/99954493029?pwd=VzhjcFYwTElhMW00azJLYk9jWUMxQT09>

Meeting ID: 999 5449 3029

Password: 224657

Join by Skype for Business

<https://incose-org.zoom.us/skype/99954493029>

Zoom Meeting Details: Every month on the Second Tuesday

Please download and import the following iCalendar (.ics) files to your calendar system.

Monthly: <https://incose->

[org.zoom.us/meeting/tJ0kcu2spzggGN3IcBd05oqs_DWkh2tBjZbJ/ics?icsToken=98tyKuChpz4uHt2WsB_uORox5HY_4LOjxmHZfjY00tRzHB3AGbRLICcZ1ObotBPra](https://incose-org.zoom.us/meeting/tJ0kcu2spzggGN3IcBd05oqs_DWkh2tBjZbJ/ics?icsToken=98tyKuChpz4uHt2WsB_uORox5HY_4LOjxmHZfjY00tRzHB3AGbRLICcZ1ObotBPra)

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