## Agile MBSE Lunch and Learn Series

with

#### **Bruce Powel Douglass, Ph.D.**

INCOSE

A FREE Virtual Event **Registration Required**  Win an autographed copy of Bruce's newly released Agile MBSE Cookbook!

> Wed Sept 22, 2021 12:30 – 1:30 PM EDT

# Session 1

### **Introduction to Model-Based Engineering:** What does a good model smell like?

Agile Model-Based stems Engineering

Dr. Bruce Powel Douglass has deep and broad expertise from over 40 years experience, specializing in both model-based systems engineering and model-driven development for embedded software for safety-critical systems. He has developed systems in a number of subject domains including aerospace, defense, medical, automotive, and telecommunications. He is a coauthor of the UML and SysML standards and is the author of over 7000 book pages from a number of technical books including Agile Model-Based Systems Engineering Cookbook (2021), Agile Systems Engineering, The Harmony aMBSE Deskbook, Real-Time UML, Real-Time UML Workshop for Embedded Systems, Real-Time Design Patterns, Doing Hard Time, Real-Time Agility, and Design Patterns for Embedded Systems in C. He is formerly the Chief Evangelist at IBM and currently the Senior Principal Agile Systems Engineer at the MITRE Corporation. His web site www.bruce-douglass.com has free papers, presentations, forums and more.



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Session Description. This session provides a short history of UML and SysML, and explains what a model is (and what it is not). It then goes on to discuss how models differ from drawings, critical aspects to consider when planning a modeling effort, and how to create effective diagrammatic representations of information held within models. The final section discusses three ways of ensuring model correctness - syntactic verification, semantic verification, and validation and how to incorporate these in model assessment for its correctness, completeness, and fitness-for-purpose.



President, Three Rivers Chapter.

Special thanks to Lavanya Krishna, Program Director, Three Rivers Chapter.



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