



November 2018 Meeting!

Thursday the 8th
Georgia Tech Research Institute
Atlanta, Georgia

“MBSE Applications on New Airbus Aircraft”

Robert Sarkissian, Dr. Horst Salzwedel
MLDesign Technologies, Inc.

Abstract

This presentation will demonstrate how later changes and redesigns can already be resolved during concept development using executable specifications/virtual prototypes at aircraft or services level. This mission/service level Model Based Systems Engineering (MBSE) approach provides for a unified top level virtual prototype built at the concept stage which includes functions, physical architectures, costs, cyber physical models, operating systems, missions, and human factors into a single comprehensive model. It will be shown how architectural optimization was achieved on the A350's/A32X avionics network resulting in 72% cost reduction over the topology employed on the A380.

Speaker Bios

Dr. Horst Salzwedel has published over 140 papers on systems engineering (SE) and MBSE over his career spanning over 30 years. He holds a Ph.D. in Aeronautical and Astronautical Sciences from Stanford University, a M.S. in Aero- and Astronautics from Technical University Munich, and a B.S. in Aircraft and Motor Vehicle Engineering from the School of Engineering in Hamburg. He has been a professor at both Stanford University and at the Technical University of Ilmenau, Germany. His expertise and research experience includes System design flow optimization, mission level system of systems (MBSE) simulation and behavior of complex coupled designs, optimal control theory, and satellite/navigation studies. He came to the US on a NASA fellowship upon the recommendation of NASA's Dr. Wernher von Braun to work on Boeing/NASA's SST program. As a founder of MLDDesign Technologies, Inc., his work in MBSE has directly influenced Government, Industry, and over 100 universities worldwide.

Robert Sarkissian's career spans over 25 years with a focus on systems engineering and the design tools and methodologies needed to support this advanced mode of complex system development. He was one of the first solutions architects taking Electronic Design Automation (EDA) and Computer Aided Design (CAE) from electronic circuits and semiconductors to the systems engineering level. He has built commercial solutions for Motorola, Siemens, Nokia, Ericsson, IBM, AT&T Bell Labs, Hewlett Packard, Tektronix, Intel, Boeing, etc. and in the federal sector for SAIC, BAE Systems, Rockwell Collins, Hughes Aircraft, TRW, Allied Signal/Bendix Aerospace, Lockheed Martin, GE Aerospace, etc.

Agenda

6:00 - 6:30 pm Social, Opening remarks from the Chapter President
6:30 - 7:30 pm Program



GTRI PARKING
INSTRUCTIONS

Map to GTRI @ 250 14th St NW, Atlanta, GA 30318:

<https://goo.gl/maps/oGPeiwd8i3k>