

Workshop Agenda

8:00 - 8:45am: Registration and Coffee

8:45 - 9:00am: Welcome and Kick-off

9:00 - 10:00am: Session #1

Keynote #1: Analytical Architecture Fault Models (1 hr)

Dr. Peter H. Feiler, Software Engineering Institute

10:00 - 10:30am: Coffee break

10:30 - 12:00pm: Session #2

A Simulation Framework for Design of Mixed Time/Event-Triggered Distributed Control Systems with SystemC/TLM (25 mins)

Zhenkai Zhang (zhenkai.zhang@vanderbilt.edu), Joseph Porter (jporter@isis.vanderbilt.edu), Xenofon Koutsoukos (xenofon.koutsoukos@vanderbilt.edu), Janos Sztipanovits (janos.sztipanovits@vanderbilt.edu)

An Analytical Model of the CAN Bus for Online Schedulability Test (25 mins)

Zhenwu Shi (zwshi@gatech.edu), Fumin Zhang (fumin@gatech.edu)

Analytic Certification Technologies for Military Avionics (20 mins)

Russell Kegley (russell.b.kegley@lmco.com), Jonathan Preston (jonathan.d.preston@lmco.com)

Integration of Mixed-Criticality Cyber-Physical Systems with Criticality Layers (20 mins)

Dionisio de Niz (dionisio@sei.cmu.edu), Anthony Rowe (agr@ece.cmu.edu)

12:00 - 1:00pm: Lunch

1:00 - 2:30pm: Session #3

Keynote #2: Compositional Safety and Security Analysis of Architecture Models (1 hr)

Dr. Michael W. Whalen, University of Minnesota

Simulation-Based Design Verification of Real-Time Distributed Automotive Systems (25 mins)

Shin'Ichi Shiraishi (sshiraishi@us.toyota-itc.com)

2:30 - 3:00pm: Coffee break

3:00 - 4:30pm: Session #4

Online Construction of Analytical Prediction Models for Physical Environments: Application to Traffic Scene Modeling (25 mins)

Anurag Umbarkar (aumbarka@ic.sunysb.edu), Shreyas Kudasara (sk.shreyas@gmail.com), Alex Doboli (adoboli@ece.sunysb.edu)

Towards a Model-Driven Engineering Software Development Framework (20 mins)

Julien Delange (julien.delange@gmail.com), Maxime Perrotin (Maxime.Perrotin@esa.int), Samir Bennani (samir.bennani@esa.int)

Roundtable Discussion (40 mins)

Closing Remarks (5 mins)