13th International ERCIM/EWICS/ARTEMIS Workshop on "Dependable Smart Embedded and Cyber-Physical Systems and Systems-of-Systems" at SAFECOMP 2018 (DECSoS '18)

Västeras, Sweden, Sept. 18, 2018

Co-hosted by the ARTEMIS/ECSEL projects AMASS, AQUAS, ENABLE-S3, IoSENSE, SemI40, AutoDrive, Productive4.0, iDev40, AfarCloud and SECREDAS

Erwin Schoitsch, AIT Austrian Institute of Technology
Amund Skavhaug, NTNU, Trondheim, Norway

Programme

8:00 - 09:00	Registration

Welcome and Introduction

09:00 – 09:30	ERCIM/EWICS/ARTEMIS DECSoS Workshop: European Research and Innovation Initiatives in the Area of Cyber-Physical Systems and Systems-of-Systems (Selective Overview); *by Erwin Schoitsch and Amund Skavhaug*

Session 1:	**Testing for Trusted Safety-Critical Systems**
09:30 – 10:00	A Testbed for Trusted Telecommunications Systems in a Safety Critical Environment; *by Ian Oliver, Gabriela Limonta, Borger Vigmostad, Aapo Kalliola, Yoan Miche, Silke Holtmanns and Kiti Muller*
10:00 – 10:30	Constraint-based Testing for Buffer Overflows; *by Loui Al Sardy, Francesca Saglietti, Tong Tang and Heiko Sonnenberg*

10:30 – 11:00	**Coffee Break**

Session 2:	**Cooperative Systems Safety & Security**
11:00 – 11:30	Multi-Layered Approach to Safe Navigation of Swarms of Drones; *by Inna Vistbakka, Amin Majd and Elena Troubitsyna*
11:30 – 12:00	Dynamic Risk Management for Cooperative Autonomous Medical Cyber-Physical Systems; *by Fabio Luiz Leite Junior, Daniel Schneider and Rasmus Adler*
12:00 – 12:30	Towards (semi-)automated synthesis of runtime safety models: A safety-oriented design approach for service architectures of cooperative autonomous systems; *by Jan Reich and Daniel Schneider*

12:30 – 13:30	**Lunch Break**

Session 3:	**Safety & Cybersecurity Systems Engineering**
13:30 – 14:00	Co-Engineering-in-the-Loop; *by Thomas Gruber, Christoph Schmittner, Martin Matschnig and Bernhard Fischer*
14:00 – 14:30	STPA Guided Model-Based Systems Engineering; *by Uwe Becker*
14:30 – 15:00	A Quantitative Approach for the Likelihood of Exploits of System Vulnerabilities; *by Siddhartha Verma, Thomas Gruber, Peter Puschner, Christoph Schmittner, and Erwin Schoitsch*
15:00 – 15:30	Safety and Security in a Smart Production Environment; *by Reinhard Kloibhofer, Erwin Kristen and Stefan Jakšić*

15:30 – 16:00	**Coffee Break**

Session 4:	**Dependability of Advanced Networks/IoT**
16:00 – 16:30	Survey of Scenarios for Measurement of Reliable Wireless Communication in 5G; *by Matthias Herlich, Thomas Pfeiffenberger, Jia Lei Du and Peter Dorfinger*
16:30 – 17:00	Application of IEC 62443 for IoT Components; *by Abdelkader Shaaban, Erwin Kristen and Christoph Schmittner*
17:00 – 17:30	Dependable Outlier Detection in Harsh Environments Monitoring Systems; *by Goncalo de Jesus, António Casimiro and Anabela Oliveira*