

CARS@EDCC2015

WORKSHOP PROGRAM

8h30 : Registration and welcome address

9h00 : Keynote speech

Session Chair: Jean-Charles Fabre (LAAS)

AUTOSAR the next generation – The Adaptive Platform

Simon Fürst (BMW/Autosar)

10 :00 : Break

10h30 : Session 1 – Development process and safety

Session Chair: Philippe Quéré (Renault)

How to Reach Complete Safety Requirement Refinement for Autonomous Vehicles

Carl Bergenhem, Rolf Johansson, Stig Ursing, Jonas Nilsson, Martin Törngren.

(Qamcom R & T AB, SP Technical Research Institute of Sweden, Semcon, Volvo Car Corporation, KTH – Sweden)

Automotive Functional Safety and Robustness Never the Twain or Hand in Glove?

Roger Rivett, Ibrahim Habli, Tim Kelly (Jaguar Land Rover, University of York – UK)

Using Model-based Development for ISO26262 aligned HSI Definition

Georg Macher, Harald Sporer, Eric Armengaud, Christian Kreiner (Graz University of Technology & AVL – Austria)

The Importance of Active Choices in Hazard Analysis and Risk Assessment

Rolf Johansson (SP – Sweden)

12 :00 : Lunch Break

13h30 : Session 2 – Fault tolerant systems

Session Chair: Tilmann Ochs (BMW Car IT)

Using formal methods for the development of safe application-specific RTOS for automotive systems

Toussaint Gautier Tigori Kabland, Jean-Luc Béchennec, Sébastien Faucou, Olivier Henri Roux (IRCCyN – France)

RACE RTE: A Runtime Environment for Robust Fault-Tolerant Vehicle Functions

Klaus Becker, Jelena Frtunikj, Meik Felser, Ludger Fiege, Christian Buckl, Stefan Rothbauer, Licong Zhang, Cornel Klein (Fortiss GmbH, Siemens AG Corporate R & T, Institute for Real-Time Computer Systems – Germany)

Towards Adaptive Fault Tolerance: From a Component-Based Approach to ROS

Michael Lauer, Matthieu Amy, William Excoffon, Matthieu Roy, Miruna Stoicescu (LAAS-CNRS – France)

Comparing Permanent and Transient Fault Tolerance of Multiple-core based Dependable ECUs

Masashi Imai and Tomohiro Yoneda (Hirosaki University, National Institute of Informatics – Japan)

15:00 : Break

15h30 : Session 3 – Evolving & Autonomous systems

Session Chair: Mario Trapp (IESE)

Program Analysis on Evolving Software

Daniel Kästner and Jan Pohland. (Absint GmbH, Germany)

The Notion of Controllability in an autonomous vehicle context

Helen Monkhouse, Ibrahim Habli and John Mcdermid. (Protean Electric Ltd, University of York – UK)

An application software download concept for safety-critical embedded platforms

Christoph Dropmann, Drausio Linardi Rossi and Bastian Zimmer. (Fraunhofer IESE – Germany)

Some Open Safety Issues in Vehicular Networks

G rard Lelann (INRIA – France)

17:00 : Mini Break

17h15 : Session 4 – Security & documentation

Session Chair: Matthieu Roy (LAAS)

Security Analysis of Linux Kernel Features for Embedded Software Systems in Vehicles

Ludwig Thomeczek (HAW Landshut, Germany)

Reconciling the ISO 26262-compliant and the agile documentation management in the Swedish context

Barbara Gallina and Mattias Nyberg (M lardalen University, Scania CV – Sweden)

18h00 : THE END

Time for speech 15 min + 5 min for questions.