REES 2017 Program

08:45      WELCOME Address
09:00      KEYNOTE Address: Multi-Layer-Resilience: The Need for Discipline
            Speaker: Wolfgang Ecker (Infineon Technology, Germany)
09:30      Session I: Resilient Systems Designs I
           I.1 Introducing Fault Tolerance to the Regularity-Based Resource Partition Model
            Darrell Knape, Albert M. K. Cheng, Yu Li (University of Houston, USA)
           I.2 Architeting Resilient IoT Systems
            Kemal A. Delic, David M. Penkler (Hewlett Packard Enterprise, France)
           I.3 Utilization of Memristor Variability Towards Brain-Inspired Resilient Computing
            Rawan Naous (King Abdullah University of Science and Technology, Saudi Arabia), Khaled Nabil Salama (The Neuroscience Research Institute, The Ohio State University, USA)
           I.4 flexMEDiC: flexible Memory Error Detection by Combined Data Encoding and Duplication
            Norman A. Rink, Jeronimo Castrillo (Technische Universität Dresden, Germany)
10:15      Poster Discussions (Session I) & Refreshments
10:45      Session II: Invited Industrial Talks - Resilient Systems in Practise
           II.1 Novel ISO26262 Compliant Architecture for Advanced Driver Assistance Systems
            Speaker: Luc van Dijk (NXP Semiconductors, The Netherlands)
           II.2 Design-for-Resiliency in Dynamically Power Managed Systems
            Speaker: Liangzehn Lai (ARM Ltd., UK)
11:45      Session III: Resilient Systems Design II
           III.1 Correction of Transient Faults by Rollback with Low Overhead for Microcontrollers
            Felix Mühlbauer (Universität Potsdam, Germany), Mario Schützel (IHP Frankfurt Oder, Universität Potsdam, Germany)
III.2 Prototyping Resilient Processing Cores in Workcraft

Georgy Lukyanov (Southern Federal University, Rostov-on-Don, Russia), Alessandro de Gennaro, Andrey Mokhov, Paulius Stankaitis, (Newcastle University, UK) Maxim Rykunov (IMEC, Belgium)

III.3 Increasing the Robustness of Digital Circuits with Ring Oscillator Clocks

Lucas Machado, Jordi Cortadella, Antoni Roca (UPC, Spain)

12:15 Lunch

13:15 Session IV: Invited Industrial Talks - Resilient Design Tools and Methods

IV.1 Simultaneous Measurement of Defect Coverage and Tolerance in AMS ICs for ISO26262 [2]
Speaker: Stephen Sunter (Mentor Graphics, Canada)

IV.2 Error Effect Simulation for Automotive using SystemC Virtual Prototypes [2]
Speaker: Andreas Mauderer (Robert Bosch GmbH, Germany)

14:15 Session V: Fault Injection Automation

V.1 An Automatic Injection Framework for Safety Assessments of Embedded Software Binaries
Peer Adelt (C-LAB, Germany), Bastian Koppelmann (Heinz Nixdorf Institute, Germany), Bernd Kleinjohann (C-LAB, Germany), Christoph Scheytt (Heinz Nixdorf Institute, Germany)

V.2 Revisiting Symbolic Software-implemented Fault Injection
Hoang M. Le, Vladimir Herdt (University of Bremen, Germany), Daniel Große, Rolf Drechsler (University of Bremen, Cyber-Physical Systems, DFKI GmbH, Germany)

V.3 Constraining Graph-based Test Case Generation by Fitness Landscaping
Stefan Müller, Jo Laufenberg (University of Tuebingen, Germany), Joachim Gerlach (Hochschule Albstadt-Sigmaringen, Germany), Thomas Kropf, Oliver Bringmann (University of Tuebingen, Germany)

V.4 Closing the Gap Between FMEDA, FTA and Simulation Based Fault Injection at System Level
Adam Himmelsbach, Sebastian Reiter, Alexander Viehl (FZI, Germany), Oliver Bringmann, Wolfgang Rosenstiel (University of Tuebingen, Germany)

15:00 Poster Discussions (Session III+V) & Refreshments

15:30 Session VI: Resilient Circuit Analysis

VI.1 Fault Injection Campaigns in Multi-Domain Virtual Prototypes
Raghavendra Koppak, Oliver Bringmann (University of Tuebingen, Germany), Andreas von Schwerin (Siemens AG, Germany)

VI.2 Workload Dependent Aged Circuit Reliability Analysis
Ajith Sivadasan, Armelle Notin, Vincent Huard, Etienne Maurin, Florian Cacho (ST Microelectronics), Lorena Anghel (TIMA)

VI.3 SPICE-Level Fault Injection with Likelihood Weighted Random Sampling - A Case Study
VI.4 Resilient Large-Scale Physical Design

Roman Bazylevych (Lviv Polytechnic National University, Ukraine), Lubov Bazylevych (Institute of Applied Problems of Mechanics and Mathematics NASU, Ukraine)

16:15 Poster Discussions (Session VI)

16:45 CLOSING

17:00 End

Back to main page [1]

Quell-URL: https://www.edacentrum.de/rees/program

Links: