

Tuesday April 2nd

- 08:00 - 09:30 Reception**
08:00 – 09:30 Tutorial 1 – “Checkpointing and Debugging in Distributed Computing” Michel Raynal (Institut Universitaire de France & IRISA, Université de Rennes 1, France)
- 09:30 – 10:00 Welcome**
10:00 – 11:00 Keynote Speaker-“A Data-Driven Approach to Security Science”
Dr. RAVISHANKAR K. IYER (University of Illinois, USA)
- 11:00 – 11:30 Coffee Break**
11:30 – 13:00 Tutorial 2 – “Architecting Resilience in Self-Adaptive Systems” Rogério de Lemos (School of Computing, University of Kent, UK), Javier Cámara (University of Coimbra, PT)
- 13:00 – 14:00 Lunch**
- 14:00 – 16:15 Technical Session I – Session Chair: Luiz Eduardo Buzato**
14:00 – 14:25 “Robustness Evaluation of Controllers in Self-Adaptive Software Systems” Javier Camara, Nuno Laranjeiro, Rogério de Lemos, Marco Vieira, Rafael Ventura – (University of Coimbra, PT and University of Kent, UK).
14:25 – 14:50 “Reliability Analysis of Software Architecture Evolution” Joao Franco, Raul Barbosa, Mário Zenha-Rela - University of Coimbra, PT.
14:50 – 15:15 “A Model-Driven Approach for Runtime Reliability Analysis” Dominik Sojer, Frank Reichenbach, Christian Buckl, Alois Knoll (Fortiss, Technische Universität München, Germany and ABB Norway).
15:15 – 15:40 “Multi-hypothesis GPS and Electronic Fence Data Fusion for Safety-Critical Positioning in Railway Work-sites” Joao Figueiras, Jesper Groenbaek, Andrea Bondavalli, Hans-Peter Schwefel, (The Telecommunications Research Center Vienna (FTW) Austria, University of Florence, Italy and Aalborg University, Denmark).

15:40 – 16:05 “Accelerating Online Model Checking” Muna Qanadilo, Sufyan Samara, Yuhong Zhao (An Najah National University, Germany and University of Paderborn, Germany).

16:05 – 16:15 Closing Technical Session I

16:15 – 16:30 Coffee Break

16:30 – 18:00 Student Forum Session – Session Chair: Hector Cancela

16:30 – 16:45 “Self-Adaptative System Case-Study of Architecture-Based Software Reliability” - João Franco (University of Coimbra, PT)

16:45 – 17:00 “Towards enhancing mobile user experience with internet and perception metrics” - Alfredo Cádiz, Gabriel Hourton, Gabriel del Canto (NIC Chile Research Labs, Chile)

17:00 – 17:15 “Benchmark the Resilience of Satellite Simulators - Denise Azevedo” (INPE, Brazil)

17:15 – 17:30 “A conditional Monte Carlo with intermediate estimations for computing MTTF of Markovian systems” - Leslie Murray (FCEIA, Universidad Nacional de Rosario, Argentina)

17:30 – 17:45 “Approximate Zero Variance Importance Sampling and Recursive Variance Reduction for diameter constrained reliability estimation” - María González, Maria Bertinat (Facultad de Ingeniería UDELAR, Uruguay)

17:45 – 18:00 Closing Student Forum Session

19:00 – 22:00 Symposium Cocktail

Wednesday – April 3rd

08:00 – 09:30 Tutorial 3 – “Holistic Optimization of Distribution Automation Smart-Grid Designs using Survivability Modeling” Alberto Avritzer (Siemens Corporate Research, USA), Daniel Mensache (Federal University of Rio de Janeiro, BR).

09:30 – 10:30 Keynote Speaker - “Security and Dependability Risks of Critical Information Infrastructures (or why Bang! is different from Crash)” **Dr. PAULO VERÍSSIMO** (University of Lisbon, PT)

10:30 – 11:00 Coffee Break

11:00 – 13:00 Technical Session II – Session Chair: Marco Vieira

11:00 – 11:30 “Diagnosis of Content Pollution in P2P Live Streaming Networks” Roverli Ziwich, Emanuel Schimidt, Elias P. Duarte Jr., Ingrid Jansch-Pôrto (Federal University of Paraná, Brazil and Federal University of Rio Grande do Sul, Brazil).

11:30 – 12:00 “A Static Analysis of Dynamic Fault Trees with Priority-AND Gates” Jianwen Xiang, Fumio Machida, Kumiko Tadano, Kazuo Yanoo, Wei Sun, Yoshiharu Maeno (NEC Corporation, Japan).

12:00 – 12:30 “Battling Bad Bits with Checksums in the Loris Page Cache” David van Moolenbroek, Raja Appuswamy, Andrew S. Tanenbaum, (Vrije Universiteit Amsterdam, The Netherlands).

12:30 – 13:00 “An automated vulnerability-based approach for Web applications attack scenarios generation” Eric Alata, Mohamed Kaaniche, Vincent Nicomette, Rim Akrouf (LAAS-CNRS, France).

13:00 – 14:00 Lunch

14:00 – 16:15 Workshop on Dependability in Adaptive and Self-Managing systems - WDAS

Welcome

14:15 – 15:15 WDAS Opening Talk – “My first ten-years with self-adaptive software” **Dr. Luciano Baresi** (Politecnico di Milano, IT).

15:15 – 16:15 WDAS Technical Session I – Chair: Genaina Rodrigues

15:15 – 15:45 “Identifying Modelling Dimensions of a Self-Adaptive Framework for Fault-Tolerant SOAs - An Experience Report” Amanda S. Nascimento, Fernando Castor, Cecilia Rubira (University of Campinas and Federal University of Pernambuco)

15:45 – 16:15 “Knowledge-Based Self-Adaptation” Emil Vashev, Mike Hinchey (Lero - the Irish Software Engineering Research Center, University of Limerick)

16:15 – 16:30 Coffee Break

16:30 – 17:30	WDAS Technical Session II – Chair: Flávia Delicato	14:00 – 14:20	“Developing a Test Suite for Basic CWE Effectiveness - Phase 3” Paul E. Black, Hsiao-Ming (Michael) Koo, Thomas Irish (NIST, USA)
16:30 – 17:00	“Dynamic Management of Integration Testing for Self-Adaptive Systems” Carlos da Silva, Rogerio de Lemos (Federal University of Rio Grande do Norte and University of Kent)	14:20 – 14:40	“An Experience of Using RACME Tool for V&V Process in Aerospace Domain” Lorenzo Vinerbi, Fabio Duchi, Fátima Mattiello-Francisco, Andrea Bondavalli (Resiltech, Italy)
17:00 – 17:30	“Towards Compositional Approach for Parametric Model Checking in Software Product Lines” Vinicius Uriel Nunes, Danilo Mendonça, Genaina Rodrigues, Vander Alves (University of Brasilia)	14:40 – 15:00	“Using Abstract Interpretation to Produce Dependable Aerospace Control Software” Rovedy Aparecida Busquim e Silva, Nanci Naomi Arai, Luciana Akemi Burgareli (IAE, Brazil)
17:30 – 18:30	WDAS Panel & Group Discussion	15:00 – 15:20	“Validation of the Satellite Speed Measurement System with the use of Formal Methods for Test Case Generation: One Experiment” Antonio Cassiano Júlio Filho, Auro Tikami, Ana Maria Ambrosio (INPE, Brazil)
	Thursday – April 4th	15:20 – 15:40	“Data Collection Based on Data Quality Management System for Operational Safety” Rosane Duque Estrada Vieira, José M. Parente de Oliveira (INFRAERO, Brazil)
08:00 – 09:30	Tutorial 1 – “Checkpointing and Debugging in Distributed Computing” Michel Raynal (Institut Universitaire de France & IRISA, Université de Rennes 1, France)	15:40 – 16:00	“FMEA as a Design Improvement Tool of protoMIRAX Attitude Control Subsystem” Paulo Véras, Paulino Scherer, Fernando Silva, Priscila Renata Silva Barros, Valdivino Alexandre de Santiago Júnior (CMPSIS, Brazil)
09:30 – 10:30	TKeynote Speaker - “Durability with BookKeeper “ Dr. FLÁVIO JUNQUEIRA (YAHOO Research, Spain).	16:00 – 16:20	“An Experience on Technology Transfer of CoFI Methodology to Automotive Domain” Fátima Mattiello-Francisco, Emilia Villani, Eliane Martins, Thiago Dutra, Bruna Coelho, Ana Maria Ambrósio (FIAT, Brazil)
10:30 – 11:00	Coffee Break	16:20 – 16:30	Coffee Break
11:00 – 12:30	Technical Session – Practical Experience Reports – Session Chair: Rogério de Lemos	16:30 – 16:50	“The SISNAV Software Project: a Report Experience” Synara Rosa Gomes dos Santos, Carlos Henrique Netto Lahoz (MECTRON, Brazil)
11:00 – 11:30	“The time dimension predicting failures: a case study” Ivano Irrera, Carlos Pereira, Marco Vieira (University of Coimbra, PT).	16:50 – 17:10	“A Framework for Dependability and Completeness in Requirements Engineering” Marina M.N. Zenun, Geilson Loureiro (EMBRAER, Brazil)
11:30 – 12:00	“Assessing the Impact of Virtualization on the Generation of Failure Prediction Data” Ivano Irrera, João Durães, Henrique Madeira, Marco Vieira (University of Coimbra and DEIS-ISEC, PT)	17:10 – 18:30	Panel - Why are Academy research results rarely used by Industry?
12:00 – 12:30	“Defining a Representative and Low Cost Fault Load for Intermittent Faults” Joaquin Gracia-Moran, Daniel Gil-Tomas, Luis J. Saiz-Adalid, Juan-Carlos Baraza-Calvo, Pedro Gil (ITACA-UPV, Spain)		
12:30 – 14:00	Lunch		
14:00 – 16:15	Industrial Track – Chair: Fatima Mattiello Francisco		

18:30

Conference Dinner

Friday – April 5th

- 09:30 – 10:30 Invited Paper – “Dependable Information Broadcast in Sparsely Connected Networks” **Sebastien Tixeuil** (Sorbonne University, France)
- 10:30 – 11:00 Coffee Break**
- 11:00 – 12:30 Technical Session III - Session Chair: Andrea Bondavalli**
- 11:00 – 11:30 “Data Center Fault Tolerant Routing and Forwarding: An Approach based on Encoded Paths” Ramon Ramos, Mag-nos Martinello, Christian Esteve Rothenberg (Federal Uni-versity of Espírito Santo and Fundação CPqD, Brazil).
- 11:30 – 12:00 “Automatically Tolerating Arbitrary Faults in Non-malicious Settings” Diogo Behrens, Stefan Weigert, Christof Fetzer (TU Dresden, Germany).
- 12:00 – 12:30 “Slicing as a Distributed Systems Primitive” Francisco Maia, Miguel Matos, Rui Oliveira, Etienne Rivière (INESC TEC / Universidade do Minho, PT and Université de Neuchâtel, Switzerland).
- 12:30 – 14:00 Lunch**
- 14:00 – 16:15 Fast Abstract – Session Chair:
- 14:00 – 14:15 “Database Modularization applied to System Evolution” Gustavo Guedes, Gisele Baioco, Regina Moraes (School of Technology – UNICAMP, Brazil)
- 14:15 – 14:30 “Characterization of a Maximum Journey in MANETs” Alex Santana, Fabíola Greve, José Garcia, Luiz Laranjeira (Federal University of Bahia and University of Brasilia, Brazil)
- 14:30 – 14:45 “Requirements of a Suitable Resilience Evaluation Frame-work for Ad hoc Networks” Miquel Martinez, Jesús Friginal, David de Andres, Juan Carlos Ruiz (Universidad Politécnica de Valencia, Spain)

- 14:45 – 15:00 “Building Situation Awareness to Monitor Critical Infrastruc-tures” Giani Petri, Raul Ceretta Nunes, Victor Lopez, Tarcisio Ceolin Junior, Osmar Marchi dos Santos (Federal University of Santa Maria, Brazil)
- 15:00 – 15:15 “Towards Runtime V&V for Service Oriented Architectures” Cristiana Areias, Nuno Antunes, João Cunha, Marco Vieira (CISUC / University of Coimbra, PT)
- 15:15 – 15:30 “KBAM: Data Model of a Knowledge Base for the Monitor-ing Attacks” Giani Petri, Raul Ceretta Nunes, Victor Lopez, Tarcisio Ceolin Junior, Osmar Marchi dos Santos (Federal University of Santa Maria, Brazil)
- 15:30 – 15:45 “Assessing software designs by simulation” Alfredo Capozucca (University of Luxembourg, Luxembourg)
- 15:45 – 16:00 “Realizing the Potential of Attack Patterns for Secure Soft-ware Development” Xiaohong Yuan (North Carolina A&T State University, USA)
- 16:00 – 16:15 Closing Fast Abstract Session
- 16:15 – 16:30 Coffee Break**
- 16:30 – 17:00 LADC Closing Session**
- 17:00 – 18:00 Business Meeting CE-TF/SBC**