



ICSEA '13
25th International Conference on SOFTWARE & SYSTEMS ENGINEERING
and their APPLICATIONS

Telecom ParisTech, Paris, November 4-6, 2013

ADVANCED PROGRAM

MONDAY, NOVEMBER 4

SESSION 1: Inaugural lectures

9:30-12:30

- Community and commercial strategies in free and open source software
Tony Wasserman – CMU SV (USA)
- A model-based approach for the design of systems and embedded software
Bernard Dion – Esterel Technologies (F)
- Integrating software and systems engineering with the incremental commitment spiral model
Barry Boehm – University of California (USA)

Invited lecture

2:00-2:30

- Neuroscience, Zen and the art of software development
Marsha Pomeroy-Huff – Carnegie Mellon University (USA)

SESSION 2: Web engineering

2:30-4:00

- A capability model for natural-language based Web service composition
Wenbin Li – INSA Lyon (F)
- Web 2.0 as an architectural approach for enterprise systems of systems in media and entertainment
John L. Brown – Turner broadcasting System, Inc. (USA)
- Multimodal Web services
Fabrice Mourlin and Charif Mahmoudi – Université Paris 12 (F)

TUTORIAL 1

2:30-5:30

Systems engineering
Cecilia Haskins – NTNU (N)

SESSION 3: Man-machine interfaces

4:00-5:00

- Mobile instruction apps based on linguistic text reduction
Günther Fliedl – Alpen Adria Universität Klagenfurt (A)
- Framework-based design and development of contactless gesture-controlled application in ambient assisted living context
Oliver Höss – HFT Stuttgart (D), Christian Schmitt, Thomas Keiser – Tellur GmbH (D), Stefan Knauth, Florian Pönisch, and Matthias Zierold – HFT Stuttgart (D)

TOOL PRESENTATION

2:30-3:30

- Achieving open source governance process with Black Duck Software
Fabrice Sollami – Black Duck Software (F)

ICSSEA's JUBILEE

6:00-10:30 pm

Concert and Dinner

TUESDAY, NOVEMBER 5

SESSION 4: Safety

9:00-12:00

- From safety integrity level to assured reliability and resilience level for compositionable safety critical systems
Eric Verhulst – Altreonic (B), Jose Luis de la Vara – Simula Research Laboratory (N), Bernhard H. C. Spath – Altreonic (B), and Vincenzo De Florio – University of Antwerp (B)
- Successfully combine functional safety and requirements engineering using ISO26262 as an example
Colin Hood – Colin Hood Systems Engineering (D)
- ISO 26262 with an ALM solution
Serge Dubois – Polarion Software (F)
- Model-based safety assessment: experiments conducted in the Built-it safe project
Frédérique Vallée – All4tec (F), Agnès Lanusse – CEA (F), Adil Alif – FAAR-Industry (F), and Youssef Laarouchi – Renault (F)
- Taking into account continuous data in a formal event-based system verification
Marc Antoni and Matthieu Houel – SNCF (F)

SESSION 5: Systems engineering

9:00-12:30

- Integrated Autosar software design
Jörg Schäuuffele, Clemens Reichmann, and Marcelino Varas – Vector Informatik GmbH (D)
- “High quality” systems engineering
Gerald Friedman – The MITRE Corp (USA)
- SysCARS: sysML for embedded automotive systems
Jean-Denis Piques – Valeo (F)
- System and operation design for space system development
Yuko Miyamoto – JAXA (J)
- Semi-formal model of a railway standard: Modeling and application in the context of the OpenETCS project
Alexandre Ginisty, Cyril Cornu, Frédérique Vallée – All4tec (F), Agnès Lanusse, and Matthieu Perin – CEA (F)

Invited lecture

- Hot and loose couplers: a systems engineering design pattern
Joseph K. DeRosa and George Rebovich – MITRE Corporation (USA)

SESSION 6: Testing

2:00-3:00

- The ubiquitous Software Black Hole
Harnessing human variance
Isaac Levendel – Levendel & Associates (USA)
- Agilty from a tester viewpoint
Vittorio Capellano – Acial (F)

TUTORIAL 2

2:00-5:00

- SysML vs UML
Pascal Roques – Consultant (F)

SESSION 7: V&V

3:30-5:00

- Maintaining the quality of information by business rules and inconsistency metrics
Hendrik Decker – Instituto Tecnológico de Informatica (E)
- Extending Barista for easier source code querying of Java programs on the Eclipse platform
John O’Hanlon and Adrian O’Riordan – University College Cork (IRL)
- Managing technical debt in IT start-ups: an industrial survey
Nicolas Devos, Dimitri Durieux, and Christophe Ponsard – CETIC (B)

TOOL PRESENTATION

4:00-5:00

- A unified solution for collaborative requirements and test management
Serge Dubois – Polarion Software (F)

Invited lecture

5:00-5:30

- Traceable product information bases for dynamic adaptive software development in learning organizations
Vassilka Kirova, Neil Kirby, and Dennis Beasley – Alcatel Lucent (USA)

WEDNESDAY, NOVEMBER 6

SESSION 8: Design & Modeling

9:00-10:30

- An overlay simulator for modeling and simulating large-scale systems
Sid Ahmed Makhlof and Belabbas Yagoubi – Université d'Oran (DZ)
- A global overview of power-train first-order modeling
Marc Demoulin and Christian Fourcade – Renault (F)
- Automated prototype generation from object-oriented designs
Sonal Dekhane – Georgia Gwinnett College (USA) and Boumediene Belkhouche – UAE University (AEU)

SESSION 9: Requirements engineering

9:00-10:30

- Treat your requirements like an asset
Cecilia Haskins – NTNU (N)
- Alignment between business requirements and services: The state of the practice
Muneera Bano, Didar Zowghi – University of Technology Sydney (AUS), and Naveed Ikram – Riphah International University (PK)
- The requirement verification delegation: a key technique for improving your maturity in requirement management
Joseph Aracic – Crescendo Technologies (F)

SESSION 10

9:00-5:00

Instrumentation & Controls modular design and V&V: The CONNEXION initiative

9:00-10:30

- Introduction to nuclear I&C design and V&V challenges
Catherine Devic and Maxime Neyret – EDF (F)
- Simulation-driven engineering applied to nuclear I&C
Jean Christophe Blanchon – CORYS (F) and François-Xavier Dormoy – Esterel Technologies (F)
- Validation test production assistance
Jean-Pierre Gallois and Jean-Yves Pierron – CEA (F)

14:00-15:30

- Design verification test production assistance
Benjamin Blanc and Bruno Marre – CEA (F)
- Mapping control function of critical systems on logic controllers by reachability analysis
Jean-Marc Faure – ENS (F) and Jean-François Pétin – CRAN (F)
- Using MaTeLo's stochastic approach to estimate availability and performance of nuclear I&C architecture
Frédérique Vallée and François Chastrette – All4Tec (F)

16:00-17:00

- Automated testing for interactive systems
Valeria Lelli Leiatoo Dantas and Arnaud Blouin – INRIA (F)
- Non-disruptive system engineering
Sylvie Vignes – Telecom Paris Tech (F)

Invited lecture

11:00-12:00

- Architecture and Internet geopolitics
Louis Pouzin – EUROLINC (F)

SESSION 11: Software Product Management

Product lines, Configuration, and Traceability

2:00-3:30

- Material needs forecast for product lines: A Bayesian-based analysis approach
Raúl Mazo – Université Paris 1 (F), Gloria Lucia Giraldo, León Jaramillo – Universidad Nacional de Colombia (CO), Camille Salinesi – Université Paris 1 (F), and Cosmin Dumitrescu – Renault (F)
- Implementation and experimentation of the content-based recommendation for a product line
Raouia Triki and Camille Salinesi – Université Paris 1 (F)
- Knowledge management in global collaborative software enterprises: Knowledge management and colored traceability
Vassilka Kirova – Alcatel-Lucent (USA), Thomas J. Marlowe – Seton Hall University (USA), and Cyril S. Ku – William Patterson University (USA)

SESSION 12: SOA Testing

4:00-5:00

- Automated testing as a service on cloud
Libero Maesano – Simple Engineering (F)

TUTORIAL 3

2:00-5:00

- SysML and Requirements Engineering
Jean-Michel Bruel – IRIT (F)