34th EUROMICRO Conference on Software Engineering and Advanced Applications
SEAA 2008

Wednesday 3 September

9:30-10:00 Opening

10:00-11:00 Keynote DSD: Rich Goldman
   Title: “The greening of the integrated circuit how electrical engineers will
   save the planet: a practical guide to low power design”

11:00-11:30 Coffee Break

11:30-12:30 Keynote SEAA: Antonia Bertolino
   Title: “A guided tour of four decades of a software testing discipline”

12:30-14:00 Lunch

14:00-15:30 Parallel sessions

MTTC 1: Grid Computing
Chair: Paul Mueller

- Secure Grid Micro-Workflows Using Virtual Workspaces
  Tim Dörnemann, Matthew Smith, Ernst Juhnke, Bernd Freisleben
- Mapping Virtual Organizations in Grids to Peer-to-Peer Networks
  Kay Dörnemann, Dennis Meier, Markus Mathes, Bernd Freisleben
- GRAIL - A Tool for Accessing and Instrumenting WSRF-compliant Web Services
  Thomas Jejkal, Rainer Stotzka, Michael Sutter

CBSE1: Services
Chair: Ivica Crnkovic

- Checking Session-Oriented Interactions between Web Services
  Pavel Parizek, Jiri Adamek
- Data Model Driven Enterprise Service Bus Interceptors
  Michael Thonhauser, Christian Kreiner, Egon Teiniker, Gernot Schmoelzer
- The WebComfort Framework: an Extensible Platform for the Development of
  Web Applications
  Joao Saraiva, Alberto Silva

SPPI1: Improving Software Management
Chair: Klaus Schmid

- Business Value through Product Line Engineering – A Case Study
  Devesh Sharma, Aybuke Aurum, Barbara Paech
- A Method for Balancing Short- and Long-Term Investments: Quality vs. Features
  Markus Lindgren, Anders Wall, Rikard Land, Christer Norström
A Framework for Simulation of Requirements Engineering Processes
   Martin Höst, Björn Regnell, Christofer Tingström

**Special Session: Software Management: SM1**
Chair: Silvia Abrahao

- A Meta-model for Assessment of Non-Functional Requirements Size
  Mohamad Kassab, Maya Daneva, Olga Ormandjieva
- Evaluation of the Effect of Functional Similarities on Development Effort
  Ozden Ozcan Top, Seckin Tunalilar, Onur Demirors,
  -IFPUG-COSMIC Statistical Conversion
  Juan J. Cuadrado-Gallego, Luigi Buglione, Ricardo J. Rejas Muslera, Fernando Machado-Piriz

15:30-16:30 Coffee Break
16:30-18:00 Parallel sessions

**MTTC 2: Multimedia Systems**
Chair: Markus Hillebrand

- Multimedia System for Emergency Services over TETRA-DVBT Networks
  Juan C. Guerri, Román Belda, Ismael de Fez, Francisco Fraile, Víctor Murcia, Pau Arce
- On Performance of 3GPP Service Triggering Mechanism in IMS Network
  Xun Zhaoyong, Jianxin Liao, Xiaomin Zhu
- Business Model Specific Charging Mechanism in Cognitive Radio
  Isiklar Gulfem, Ayse Basar Bener

**CBSE 2: Product Lines**
Chair: Christo Angelov

- InCoME: Integrated Cost Model for Product Line Engineering
  Jarley Nabrega, Eduardo Almeida, Silvio Meira
- Managing the Life-cycle of Industrial Automation Systems with Product Line Variability Models
  Roman Froschauer, Deepak Dhungana, Paul Grnbacher
- A Case Study in Software Product Lines - The Case of the Mobile Game Domain
  Leandro Nascimento, Eduardo Almeida, Silvio Meira

**SPPI 2: Defect Prediction and Prevention**
Chair: Martin Höst

- Software Defect Prediction Using Call Graph Based Ranking (CGBR) Framework
  Gozde Kocak, Burak Turhan, Ayse Bener
- Towards a Defect Prevention Based Process Improvement Approach
  Marcos Kalinowski, Guilherme Travassos, David Card
- Defect Prediction using Combined Product and Project Metrics: A Case Study from the Open Source
  “Apache” MyFaces Project Family
  Dindin Wahyudin, Alexander Schatten, Dietmar Winkler, Stefan BiffI, A Min Tjoa
Special Session: Software Management: SM2
Chair: Maya Daneva

- Comparing Software Cost Prediction Models by a Visualization Tool
  Nikolaos Mittas, Lefteris Angelis
- A Case Study Using Web Objects and COSMIC-FFP for Effort Estimation of Web Applications
  Filomena Ferrucci, Carmine Gravino, Sergio Di Martino
- A Proposed Method for Release Planning from Use Case-based Requirements Specification
  Ákos Szoke

20 Welcome Cocktail - Palazzo Sanvitale
Thursday 4 September

9:00-10:00 Keynote SEAA: Jürgen Münch
   Title: “Software Process Improvements: Opportunities & Risks”

10:00-11:00 Keynote DSD: Tom Williams
   Title: “EDA to the Rescue of the Silicon Roadmap”

11:00-11:30 Coffee Break

11:30-12:30 Keynote DSD: Alessandro Cremonesi
   Title: “Semiconductor Industry Challenges & Opportunities”

12:30-14:00 Lunch

14:00-15:30 Parallel sessions

Special Session: Next Generation Web Computing (NGW)
   Chair: Konrad Klockner
   - VieCAR – Enabling Self-adaptive Collaboration Services
     Daniel Schall, Christoph Dorn, Schahram Dustdar, Ignazio Dadduzio
   - Web Browser as an Application Platform
     Tommi Mikkonen, Antero Taivalsaari, Dan Ingalls, Krzysztof Palacz
   - Evaluation of Task Pattern Use in Web-based Collaborative Engineering
     Kurt Sandkuhl, Janis Stirna
   - Building Blocks for a Web Programming Language
     Tuomas Turto

CBSE 3: OSGi
   Chair: Franck Barbier
   - Enhanced OSGi Bundle Updates to Prevent Runtime Exceptions
     Premysl Brada
   - Method for resource monitoring of OSGi-based software components
     Tuukka Miettinen, Daniel Pakkala, Mika Hongisto
   - Service Coroner: A Diagnostic Tool for locating OSGi Stale References
     Kiev Gama, Didier Donsez

SPPI 3 „Agile Software Engineering and Product Lines“
   Chair: Dindin Wahyudin
   - Understanding Decision-Making in Agile Software Development: a Case-study
     Nils Brede Moe, Aybüke Aurum
   - Investigating UML- and Ontology-Based Approaches for Process Improvement in Developing Agile Multi-Agent Systems
     Thomas Moser, Klemens Kunz, Kamil Matousek, Dindin Wahyudin
   - Migrating Industrial Systems towards Software Product Lines: Experiences and Observations through Case Studies
     Hongyu Pei Breivold, Stig Larsson, Rikard Land
**Special Session: Software Management: SM3**
**Chair:** Lefteris Angelis

- Complementing Measurements and Real Options Concepts to Support Inter-iteration Decision-Making in Agile Projects
  Zornitza Racheva, Maya Daneva, Luigi Buglione
- A Metamodeling Approach to Estimate Software Size from Requirements Specifications
  Silvia Abrahao, Emilio Insfran,
- Outlining a Risk-Driven Agile Development Model
  Jaana Nyfjord, Mira Kajko-Mattsson

15:30-16:00 Coffee Break

16:00-17:00 Parallel sessions

**CBSE 4: Embedded Systems**
**Chair:** Kung-Kiu Lau

- Reconfigurable State Machine Components for Embedded Applications
  Christo Angelov, Yu Guo, Ke Xu, Krzysztof Sierszecki
- Introducing Component Based Software Engineering at an Embedded Systems Sub-Contractor
  Mikael Akerholm, Kristian Sandström, Ivica Crnkovic

**SPPI 4: Requirements Prioritization and Portfolio Management**
**Chair:** Maya Daneva

- Requirements Prioritization Based on Benefit and Cost Prediction: A Method Classification Framework
  Maya Daneva, Andrea Herrmann
- An Empirical Study into Current Practices and Challenges in IT Project Portfolio Management
  Egon Gleisberg, Hendril Zondag, Michel R.V. Chaudron

**Special Session: Quality and Service-Oriented Applications**
**Chair:** Raffaela Mirandola

- Service Consolidation with End-to-End Response Time Constraints
  Jonatha Anselmi, Edoardo Amaldi, Paolo Cremonesi
- Iterative Service Orchestration based on Dependability Attributes
  Joachim Götze, Jochen Müller, Paul Müller

17:00 Social Event
Friday 5 September

9:00-10:00 Keynote SEAA: Raj Rajkumar
Title: “Automotive Cyber-Physical Systems: Challenges and Opportunities”

10:00-11:00 Keynote SEAA: Reiner Hartenstein
Title: “Von-Neumann-centric Computing: unaffordable soon?”

11:00-11:30 Coffee Break

11:30-13:00 Parallel Sessions

CBSE & SOA PANEL: SOA and Quality Assurance

SPPI 5 „Evaluation Methods for Products and Processes“
Chair: Stefan Biffl

• The Role of Experience in Software Testing Practice
  Armin Beer, Rudolf Ramler
• Evaluating RUP Software Development Processes Through Visualization of Effort Distribution
  Werner Heijstek, Michel R. V. Chaudron
• Towards Efficient Software Component Evaluation
  Rikard Land, Alexandre Alvaro, Ivica Crnkovic

Special Session: Software Architectures for Pervasive Systems
Chair: Nenad Medvidovic

- A Flexible Infrastructure for Data Propagation in Heterogeneous Smart Item Environments
  Falk Brauer, Daniel Barisic, Mario Neugebauer and Guido Stromberg.
- Vimoware - a Toolkit for Mobile Web Services and Collaborative Computing
  Hong-Linh Truong, Lukasz Juszczak, Shariq Bashir, Atif Manzoor and Schahram Dustdar
- SAIL: a Sensor Abstraction and Integration Layer for Context Aware Architectures
  Stefano Lenzi, Francesco Furfari, Stefano Chessa and Michele Girolami

13:00-14:30 Lunch

14:30-16:00 Parallel Sessions

CBSE 5: Component Models
Chair: Premysl Brada

- Component design based on model executability
  Franck Barbier, Eric Cariou
- A Compositional Approach to Active and Passive Components
  Kung-Kiu Lau, Ioannis Ntalamakas
- A Fault-tolerance Framework for Distributed Component Systems
  Brahim Hamid, Patrick Vanuxem, Ansgar Radermacher, Agnes Lanusse, Sebastien Gerard
**Special Session: Distributed Embedded Software Systems**  
Chair: Horst Wedde

- A Software Framework for Hard Real-Time Distributed Embedded Systems,  
  C. Angelov, K. Sierszecki, Fenf Zhou
- Formal Analysis of a Distributed Fault Tolerant Clock Synchronization Algorithm for Automotive Communication Systems,  
  Bo Zhang
- Distributed Embedded Real-Time Systems and Beyond: A Vision of Future Road Vehicle Management  
  H.F. Wedde, S. Lehnhoff, C. Rehtanz, O. Krause

**Special Session: Quality and Service-Oriented Applications 2**  
Chair: Markus Hillebrand

- Let The Puppets Move! Automated Testbed Generation for Service-oriented Mobile Applications  
  Guglielmo De Angelis, Antonia Bertolino, Francesca Lonetti, Antonino Sabetta,
- SEMF - Service Evolution Management Framework  
  Martin Treiber, Hong-Linh Truong, Schahram Dustdar
- BPEL Workflows Combining Standard OGC Web Services and Grid-enabled OGC Web Services  
  Tino Fleuren, Paul Müller

**WIP Session**  
Chair: Konrad Klockner

- Concepts for Flexible Component Integration for Product Lines  
  Holger Eichelberger, Klaus Schmid
- Operationalizing Project Controlling  
  Edward Fischer
- A Proposed Method to Project Planning from UML Models  
  Ákos Szőke
- Process Improvement Framework for Software Product Lines  
  Sathya Ganesha, Muthu Ramachandran
- Risk Assessment in Software Development Projects  
  Jitka Kreslíková, Šárka Květínková
- Software Reliability Estimation for Component-based Systems by Evaluation of Operational Experience gained with Components  
  S. Söhnlein, F. Saglietti
- Psychological Design Factors in Web Usability  
  Mushtaq Raza
- Translation regular expressions  
  Vít Fábera, Vlastimil Jáneš, Mária Jánešová
- Recognizing of Language by an Acceptor or a Petri Net  
  Josef Bokr, Vlastimil Jáneš, Mária Jánešová
- SaferTIP -- A Safety Extension to the Test Improvement Profile (TIP)  
  Sergey Vinogradov

17:00-18:30

**WIP Session**  
Chair: Konrad Klockner

- MAC Sublayer in IEEE 802.11 using DCF and PCF
Sweta Verma, Sanjay Singh
-A Truly Jitter-Free Real-Time Kernel
Nicolae Marian, Peng Jiang
-A Web-based Data-sharing Scheme in Peer-to-Peer File-transfer System for Collaborated CAE
Min-hwan Ok, Hyun-seung Jung
-SEMIC.EU - An Open Repository for Interoperability Specifications
Helmut Adametz, Sören Bittins, Jan Gottschick
- EUFORIA --- Simulation Environment for ITER Fusion Research
Rainer Stotzka, Enrique Morales-Ramos, Mats Aspnäs, Jan Aström, Miguel Cárdenas-Montes,
Francisco Castejón, José María Cela, David P. Coster, Antonio Gómez-Iglesias, Bernard Guillermi,
Ahmad Hammad, Marcus Hardt, Leon Kos, Daniela Piccioni–Koch, Isabel Campos Plasencia,
Marcin Plociennik, Gevorg Poghosyan, Lorna Smith, Eric Sonnendrücker, Pär Strand, Jan Westerholm
-Using MUSICXML in Real-Time Applications
Joachim Ganseman, Paul Scheunders, Wim D’haes