# 2011 34th IEEE Software Engineering Workshop
## SEW 2011
### Table of Contents

**Foreword**

**Conference Committee Members and Reviewers**

### Requirements Specification & Analysis 1

Architectural Models of Ambient-PRISMA in Channel Ambient Calculus

* Nour Ali and Emilio Tuosto

An ASSL Approach to Handling Uncertainty in Self-adaptive Systems

* Emil Vassev, Mike Hinchey, Dharini Balasubramaniam, and Simon Dobson

Language for Use Case Specification

* Dušan Savić, Ilija Antović, Siniša Vlajić, Vojislav Stanojević, and Miloš Milić

An Approach to Synchronize UML-Based Design Components for Model-Driven Protocol Development

* Prabhu Shankar Kaliappan and Hartmut Koenig

### Security

Offline Validation of Firewalls

* Stephan Windmüller

Availability Assessment of Embedded Systems with Security Vulnerabilities

* Andrew J. Kornecki, Janusz Zalewski, and Wendy F. Stevenson

### Software Quality Assurance 1

Metrics and Antipatterns for Software Quality Evaluation

* Francesca Arcelli Fontana and Stefano Maggioni

Requirement-Driven Evaluation of Remote ERP-System Solutions: A Service-oriented Perspective

* Markus Doedt and Bernhard Steffen
Special Session

Special Session on “Simplification through Change of Perspective” .................................................................67
Tiziana Margaria and Bernhard Steffen

A Change of Perspective Yields Formal Analysis ..................................................................................................69
R. Grosu, F. Fenton, S. Smolka, and E. Bartocci

Constraint-oriented Variability Modeling ................................................................................................................77
Ina Schaefer, Anna-Lena Lamprecht, and Tiziana Margaria

Simplified Validation of Emergent Systems through Automata Learning-Based Testing ........................................84
Bernhard Steffen and Johannes Neubauer

Software Development and Maintenance

Implementing Software Effort Estimation in a Medium-sized Company .................................................................92
João Carlos Cunha, Sérgio Cruz, Marco Costa, Ana Rita Rodrigues, and Marco Vieira

Software Maintenance through Supervisory Control ............................................................................................97
Benoit Gaudin and Alessandra Bagnato

Energy Efficiency with Runtime Models for Energy-aware Embedded Systems ......................................................106
Zdravko Karakehayov and Emil Vassev

Software Reuse

Integrating GQM and Data Warehousing for the Definition of Software Reuse Metrics ......................................112
Marco Vieira, Henrique Madeira, Sérgio Cruz, Marco Costa, and João Carlos Cunha

Towards a Framework for Weapon Control Systems ...........................................................................................117
Kevin P. Adams and Denis Gračanin

Software Quality Assurance 2

Variability and Rigour in Service Computing Engineering .....................................................................................122
Maurice H. ter Beek, Stefania Gnesi, Alessandro Fantechi, and José L. Fiadeiro

Applying the Test Template Framework to Aerospace Software ..........................................................................128
Maximiliano Cristià, Pablo Albertengo, Claudia Frydman, Brian Plüss, and Pablo Rodríguez Monetti

Toward Intelligent Software Defect Detection - Learning Software Defects by Example ....................................138
Markland J. Benson