Contents

Invited Paper

What Do We Know and How Well Do We Know It? Current Knowledge About Software Engineering Practices ........................................ 3
   David Budgen

Software Paradigm Trends

Filtered Model-Driven Product Line Engineering with SuperMod:
The Home Automation Case. .................................................. 19
   Felix Schwägerl, Thomas Buchmann, and Bernhard Westfechtel

A Semantic Versioning Service Based on Formal Certification .......... 42
   Jean-Yves Vion-Dury and Nikolaos Lagos

An Eclipse IDE for Teaching Java— ......................................... 63
   Lorenzo Bettini and Pierluigi Crescenzi

Supporting Privacy Impact Assessments Using Problem-Based Privacy Analysis ....................................................... 79
   Rene Meis and Maritta Heisel

Integrating Model Driven and Model Checking to Mine Design Patterns .... 99
   Mario L. Bernardi, Marta Cimitile, Giuseppe De Ruvo,
   Giuseppe A. Di Lucca, and Antonella Santone

R-UML: An UML Profile for Verification of Flexible Control Systems .... 118
   Mohamed Oussama Ben Salem, Olfa Mosbah, Mohamed Khalgui,
   and Georg Frey

Invariant Implementation for Domain Models Applying Incremental OCL Techniques ..................................................... 137
   Alberto-Manuel Fernández-Álvarez, Daniel Fernández-Lanvin,
   and Manuel Quintela-Pumares

An Ontological Analysis of a Proposed Theory for Software Development. .. 155
   Diana Kirk and Stephen MacDonell

Software Engineering and Applications

Specifying Business Process Outsourcing Requirements .................. 175
   Mouna Rekik, Khouloud Boukadi, and Hanene Ben-Abdallah
Supporting Deviations on Software Processes: A Literature Overview

Manel Smatti, Mourad Oussalah, and Mohamed Ahmed Nacer

Protection of Customers’ and Suppliers’ Knowledge in Software Development Projects with Fixed-Price Contract: Using Property Rights Theory

Cornelia Gaebert

GQM-Based Definition and Evaluation of Software Project Success Indicators

Luigi Lavazza, Enrico Frumento, and Riccardo Mazza

Dynamic Analysis Techniques to Reverse Engineer Mobile Applications

Philippe Dugerdil and Roland Sako

Annotating Goals with Concerns in Goal-Oriented Requirements Engineering

Shinpei Hayashi, Wataru Inoue, Haruhiko Kaiya, and Motoshi Saeki

A Model-Based Approach for Integrating Executable Architectural Design Patterns in Space Flight Software Product Lines

Julie Street Fant, Hassan Gomaa, and Robert G. Pettit

Model Checking Feature Interactions

Thibaut Le Guilly, Petur Olsen, Thomas Pedersen, Anders P. Ravn, and Arne Skou

Deriving Tailored UML Interaction Models from Scenario-Based Runtime Tests

Thorsten Haendler, Stefan Sobernig, and Mark Strembeck

Documenting and Designing QVTo Model Transformations Through Mathematics

Ulyana Tikhonova and Tim Willemse

An Approach for the Automatic Adaptation of Domain-Specific Modeling Languages for Model-Driven Mobile Application Development

Xiaoping Jia and Christopher Jones

Automated Testing of Distributed and Heterogeneous Systems Based on UML Sequence Diagrams

Bruno Lima and João Pascoal Faria

Guiding Cloud Developers to Build Energy Aware Applications

Christophe Ponsard, Jean-Christophe Deprez, and Raphael Michel
SPACES: Subjective sPaces Architecture for Contextualizing hEterogeneous Sources ........................................... 415

Daniela Micucci, Marco Mobilio, and Francesco Tisato

Author Index ................................................................. 431
Software Technologies
10th International Joint Conference, ICSoft 2015,
Colmar, France, July 20-22, 2015, Revised Selected
Papers
Lorenz, P.; Cardoso, J.; Maciaszek, L.A.; van Sinderen, M.
(Eds.)
2016, XV, 431 p. 174 illus. in color., Softcover
ISBN: 978-3-319-30141-9