Contents

Invited Talks

Software is Data Too: How Should We Deal With It?
Andrian Marcus ......................................................................................................................... 1

Empirical Studies on Software Evolution: Should we (try to) claim Causation?
Massimiliano Di Penta ............................................................................................................... 2

Session 1: Identifying, Recording and Replaying Software Changes

Do Metrics Help to Identify Refactoring?
Jean-Guy Schneider, Rajesh Vasa, and Leonard Hoon .............................................................. 3

Recording Finer-Grained Software Evolution with IDE: An Annotation-Based Approach
Shinpei Hayashi and Motoshi Saeki ........................................................................................... 8

Replaying Past Changes in Multi-developer Projects
Lile Hattori, Mircea Lungu, and Michele Lanza ........................................................................ 13

Session 2: Reverse Engineering

Identifying Cross-Cutting Concerns Using Software Repository Mining
Frank Mulder and Andy Zaidman ............................................................................................... 23

Redocumentation of a Legacy Banking System
Joris Van Geet, Peter Ebraert, and Serge Demeyer ..................................................................... 33

Session 3: Tool Demonstration

A Framework for Analysing and Visualising Open Source Software Ecosystems
Mathieu Goeminne and Tom Mens ............................................................................................. 42

Session 4: Language and Requirements Evolution

An Exercise in Iterative Domain-Specific Language Design
Marcel van Amstel, Mark van den Brand, and Luc Engelen ....................................................... 48

An Automated Hint Generation Approach for Supporting the Evolution of Requirements
Specifications
Eya Ben Charrada and Martin Glinz ............................................................................................ 58
Session 5: Empirical Studies in Open Source Software Evolution

An Empirical Study of the Evolution of Eclipse Third-party Plug-ins
John Businge, Alexander Serebrenik, and Mark van den Brand.......................... 63

An Empirical Study on Open Source Software
Keisuke Hotta, Yukiko Sano, Yoshiki Higo, and Shinji Kusumoto............................ 73

Evolutional Analysis of Licenses in FOSS
Yuki Manabe, Yasuhiro Hayase, and Katuro Inoue ........................................... 83

Session 6: Evolution of (Re)configurable Applications

Multi-Tenant SaaS Applications: Maintenance Dream or Nightmare?
Cor-Paul Bezemer and Andy Zaidman................................................................. 88

Feature Oriented Evolutions for Context-Aware Adaptive Systems
Paola Inverardi and Marco Mori................................................................. 93