Final Program

International Workshop on Principles of Software Evolution (IWPSE2002)

http://IWPSE2002.ics.es.osaka-u.ac.jp/

May 19 – 20, 2002

Orland, Florida, USA

(In conjunction with the International Conference on Software Engineering, ICSE2002)
Sponsored by Information Processing Society of Japan, SIGSE
In cooperation with ACM SIGSOFT

Sunday, May 19, 2002

09:00 – 09:15   Opening

09:15 – 10:30   Keynote
(Chair: Katsuro Inoue, Osaka University, Japan)
Evolvable Programming Based on Collaboration-Field and Role Model
Tetsuo Tamai (University of Tokyo, Japan)

10:30 – 11:00   Break

11:00 – 12:30   Session 1 (Full Technical Papers): Evolution in Source Code
(Chair: Takako Nakatani, SLagoon, Japan)
Challenges of Refactoring C Programs
Alejandra Garrido and Ralph Johnson (University of Illinois at Urbana-Champaign, USA)

A Method for Detecting Faulty Code Violating Implicit Coding Rules
Tomoko Matsumura, Akito Monden and Ken-ichi Matsumoto (NAIST, Japan)

Fostering Component Evolution with C# Attributes
Carlo Ghezzi and Mattia Monga (Politecnico di Milano, Itary)

12:30 – 14:00   Lunch

14:00 – 15:30   Session 2 (Short Papers): System and Practical Issues
(Chair: Hausi Muller, University of Victoria, Canada)
Collaboration-Based Evolvable Software Implementations: Java and Hyper/J vs.
C++-Templates Composition
Nguyen Truong Thang and Takuya Katayama (JAIST, Japan)

Evolution in Adaptive Hypermedia Systems
Nuria Medina-Medina (Granada University, Spain)*, Lina García-Cabrera* (Jaén University, Spain)*, J. Jesús Torres-Carbonell* (Ministerio de Ciencia y Tecnología., Spain) *and José Parets-Llorca* (Granada University, Spain)

A Framework for Flexible Evolution in Distributed Heterogeneous Systems
Eric Wohlstadter, Brian Toone and Prem Devanbu (University of California, Davis, USA)

Evolving and Using Coordinated Systems
M.Wermelinger (New University of Lisbon, Portugal)*, G.Koutsoukos* (Oblog Software, Portugal)*, J.L.Fiadeiro* (University of Lisbon, Portugal)*, L.Andrade* (ATX Software, Portugal) *and J.Gouveia* (Oblog Software, Portugal)

DMS: Program Transformations for Practical Scalable Software Evolution
Ira D. Baxter (Semantic Designs, USA)

15:30 – 16:00   Break

16:00 – 17:30   Session 3 (Short Papers): Middleware Issues
(Chair: Kumiyo Nakakoji, University of Tokyo, Japan)
A Verification of Class Structure Evolution Model and Its Parameters
Mikio Ohki (Nippon Institute of Technology, Japan)*, Shinjiro Akiyama* (JIP Engineering Service, Japan) *and Yasushi Kambayashi* (Nippon Institute of Technology, Japan)

A Software Model for Flexible and Safe Adaptation of Mobile Code Programs
Noriki Amano (JAIST, Japan) *and Takuo Watanabe* (Tokyo Institute of Technology, Japan)

The Role of Dependencies in Component-Based Systems Evolution
Marlon Vieira and Debra Richardson (University of California, Irvine, USA)

Library Evolution for Reliable Software
Noritoshi Atsumi, Shoji Yuen, Kiyoshi Agusa (Nagoya University, Japan) *and Shinichirou Yamamoto* (Aichi Prefectural University, Japan)

Dynamic Component and Code Co-Evolution
Markus Pizka (Technische Universität München, Germany)

Monday, May 20, 2002

09:00 – 10:30   Session 4 (Full Technical Papers): Evolution Patterns and Models
(Chair: Michael Godfrey, University of Waterloo, Canada)
Evolution Patterns of Open-Source Software Systems and Communities
Kumiyo Nakakoji, Yasuhiro Yamamoto (NAIST, Japan)*, Yoshiyuki Nishinaka, Kouichi Kishida* (SRA Key Technology Laboratory, Japan) *and Yunwen Ye* (University of Colorado

at Boulder, USA)

Tool Support for Engineering Adaptability into Software Architecture
Nary Subramanian (Anritsu, USA) *and Lawrence Chung* (University of Texas at Dallas, USA)

Evaluating the Applicability of Reliability Prediction Models between Different Software
Shin-ichi Sato (NTT DATA, Japan), *Akito Monden and Ken-ichi Matsumoto* (NAIST, Japan)

10:30 – 11:00 Break

11:00 – 12:30 Session 5 (Short Papers): Analysis Issues
(Chair: Carlo Ghezzi, Politecnico di Milano, Itary)
Metrics and Analysis of Software Architecture Evolution with Discontinuity
Mikio Aoyama (Nanzan University, Japan)

Change Impact Analysis for Aspect-Oriented Software Evolution
Jianjun Zhao (Fukuoka Institute of Technology, Japan)

An Approach to Evolving Database Dependent Systems
Mark Grechanik, Dewayne Perry and Don Batory (University of Texas at Austin, USA)

Tracking Structural Evolution Using Origin Analysis
Michael Godfrey and Qiang Tu (University of Waterloo, Canada)

Analysis of Software Evolution Processes Using Statistical Distribution Models
Tetsuo Tamai (University of Tokyo, Japan) *and Takako Nakatani* (SLagoon, Japan)

12:30 – 14:00 Lunch

14:00 – 15:30 Session 6 (Short Papers): Conceptual Issues
(Chair: Manny Lehman, Imperial College, UK)
SOMA: A Paradigm to Evolve Software Based on Separation of Concerns
Toshihiro Kamiya (Japan Science and Technology, Japan)

Towards Consistency-Preserving Model Evolution
Gregor Engels, Jochen M. Küster, Reiko Heckel (University of Paderborn, Germany) *and Luuk Groenewegen* (Leiden University, Netherlands)

Environmental Scenarios and Requirements Stability
David Bush (UK National Air Traffic Services, UK) *and Anthony Finkelstein* (University College London, UK)

Supporting Software Evolution with Intentional Software Views
Kim Mens (Université catholique de Louvain, Belgium)*, Tom Mens* (Vrije Universiteit Brussel, Belgium) *and Michel Wermelinger* (Universidade Nova de Lisboa, Portugal)

Computation Scrapbooks for Software Evolution
Richard Potter (Japan Science and Technology, Japan) *and Masami Hagiya* (University of Tokyo, Japan)

15:30 – 16:00   Break

16:00 – 17:30   Closing