

Message from the Chairs

Welcome to the 14th International Workshop on Principles of Software Evolution (IWPSE'15) co-located with ESEC/FSE 15, August 30th 2015 in Bergamo, Italy. IWPSE'15 groups high-quality papers presenting experiments, surveys, approaches, techniques and tools related to the evolution of software systems.

Research in software evolution and evolvability has been thriving in the past years, with a constant stream of new formalisms, tools, techniques, and development methodologies. Research in software evolution has two goals. The first is to facilitate the way software systems can be changed so they become long-lived; this includes coping with demands from users and with the increasing complexity and volatility of contexts in which such systems may operate. The second goal is to understand and if possible control the processes by which demand for these changes come about.

Topics of interest include, but are not limited to:

- Application areas: distributed, embedded, real-time, ultra large scale, and self-adaptive systems, web services, mobile computing, information systems, systems of systems, etc.
- Paradigms: support and barriers to evolution in aspect-oriented, agile, component-based, and model-driven software development, service-oriented architectures, etc.
- Technical aspects: co-evolution and inconsistency management, impact analysis and change propagation, dynamic reconfiguration and updating; architectures, tools, languages and notations for supporting evolution, etc.
- Managerial aspects: effort and cost estimation, risk analysis, software quality, productivity, process support, training, awareness, etc.
- Empirical studies related to software evolution.
- Mining software repositories approaches and techniques supporting software evolution.
- Industrial experience on successes and failures related to software evolution.
- Interdisciplinary approaches: adaptation of evolutionary concepts and measures from other disciplines (biology, geology, etc.) to software evolution.
- Theories and models to explain and understand software evolution.

Given the increasing importance of empirical studies in our field, we found it relevant to devote the first session to hear about the pitfalls and achievements of empirical studies in software engineering from one of the most experienced researchers on Empirical Software Engineering, Prof. Sandro Morasca (from Università degli Studi dell'Insubria, Italy).

This year, we received a total of 13 submissions (11 research papers and 2 position papers) from Algeria, Belgium, Canada, Finland, France, Italy, Japan, Malta, Netherlands, Pakistan, Sweden, and United Kingdom. From this we selected 9 research papers. Each paper was thoroughly reviewed by at least three reviewers, followed by an open discussion in EasyChair where program committee members had the opportunity to discuss all papers except those for which they had a conflict of interest. After the

keynote talk, we will have three sessions: Refactoring and Testing, APIs and Human Factors, and Analysis Techniques. Each session presenting three papers.

We would like to thank the authors for the high quality papers they submitted, and the program committee members and additional reviewers for their detailed reviews submitted on time in our tight schedule. We hope that you will find the program interesting and we look forward to meeting everyone at the workshop in Bergamo.

Gregorio Robles and Ángela Lozano
IWPSE'15 Programme Co-chairs

IWPSE'15 Organization

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