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Trustworthy Software Development Processes

International Conference on Software Process, ICSP 2009
Vancouver, Canada, May 16-17, 2009
Proceedings

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Preface

This volume contains papers presented at the International Conference on Software Process (ICSP 2009) held in Vancouver, Canada, during May 16-17, 2009. ICSP 2009 was the third conference of the ICSP series, continuing the software process workshops from 25 years ago. The theme of ICSP 2009 was "Processes to Develop Trustworthy Software."

Software development takes place in a dynamic context of frequently changing technologies and limited resources. Teams worldwide are under increasing pressure to deliver trustworthy software products more quickly and with higher levels of quality. At the same time, global competition is forcing software development organizations to cut costs by rationalizing processes, outsourcing part or all of their activities, reusing existing software in new or modified applications and evolving existing systems to meet new needs, while still minimizing the risk of projects failing to deliver. To address these difficulties, new or modified processes are emerging including lean and agile methods, plan-based product line development, and increased integration with systems engineering processes.

Papers present research and real-world experience in many areas of software and systems processes impacting trustworthy software including: new software development approaches; software quality; integrating software and business processes; CMMI and other process improvement initiatives; simulation and modeling of software processes; techniques for software process representation and analysis; and process tools and metrics.

In response to the call for papers, 96 submissions were received from 26 different countries and regions including: Australia, Austria, Brazil, Canada, Chile, China, Colombia, Finland, France, Germany, Greece, India, Ireland, Italy, Japan, Mexico, New Zealand, Pakistan, Russia, Serbia, Singapore, Spain, Sweden, Turkey, UK, and USA. Each paper was rigorously reviewed and held to very high quality standards, and finally 33 papers from 12 countries and regions were accepted as regular papers for presentations at the conference.

The papers were clustered around topics and presented in seven regular sessions organized in two parallel threads. Topics included process management, process tools, process modeling and representation, process analysis, process simulation modeling, experience report, process metrics.

Highlights of the ICSP2009 program were three keynote speeches, delivered by Günther Ruhe (University of Calgary, Canada), Rick Selby (Northrop Grumman Space Technology, USA), and Lionel C. Briand (Simula Research Laboratory and University of Oslo, Norway).

On this 25th anniversary of workshops in the field, it was gratifying to see increasing maturity in the work with the continued high rate of submissions from all over the world. Although this was only the third ICSP conference, it continued a long tradition of important workshops and conferences in the field starting with the International Software Process Workshop (ISPW, from 1984 to 1996), the International

Conference on the Software Process (ICSP, from 1991 until 1996), the International Workshop on Software Process Simulation and Modeling (ProSim, from 1998 until 2006), and the Software Process Workshop (SPW, in 2005 and 2006). ProSim and SPW were held together in 2006 and merged in 2007 to form the new International Conference on Software Process. This year we were able to tighten the review process with the help of our reviewers to keep up the tradition.

This conference would not have been possible without the dedication and professional work of many colleagues. We wish to express our gratitude to all contributors for submitting papers. Their work forms the basis for the success of the conference. We also would like to thank the Program Committee members and reviewers because their work guarantees the high quality of the workshop. Special thanks go to the keynote speakers for giving their excellent presentations at the conference. Finally, we also would like to thank the members of the Steering Committee, Barry Boehm, Mingshu Li, Leon Osterweil, David Raffo, and Wilhelm Schäfer for their advice, encouragement, and support.

We wish to express our thanks to the organizers for their hard work. The conference was sponsored by the Chinese Academy of Sciences (ISCAS) and the ISCAS Laboratory for Internet Software Technologies (iTechs). We also wish to thank the 31st International Conference on Software Engineering (ICSE 2009) for sponsoring this meeting as an ICSE co-located event. Finally, we acknowledge the editorial support from Springer for the publication of this proceeding.

For further information, please visit our website at
http://www.icsp-conferences.org/icsp2009.

March 2009

Dietmar Pfahl
Raymond Madachy
Qing Wang

International Conference on Software Process 2009

Vancouver, Canada
May 16–17, 2009

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