Introduction

The objective of the Software Technologies and Engineering Practice (STEP) 2003 International Workshop was to focus on current and forthcoming applications and emerging trends in software engineering practice.

About STEP

The distinctive feature of STEP is its highly interactive workshop style, which combines informed opinion with development of the understanding of best software practice. Eight one-day and two half-day workshops on selected topics were conducted during STEP 2003. Each workshop reviewed and extended a road map for software technologies with contributions on new development, practical experience, technology evaluation, and gap analyses.

Contributions were synthesized during debate and discussion and consolidated in a workshop report that updates the evolving road map.

Workshop Focus

The focus of each workshop was to develop a technical road map for a selected area with an emphasis on practical applications. The workshop organizers began with a draft outline of the road map, and this coalesced through the discussions. Presenters identified promising trends including their own work and experience reports. Action items were then explicitly recorded for each workshop.

Because the objective of these workshops was to develop new knowledge through the interaction of their participants, it was decided to publish the proceedings afterward. These proceedings are thus a combination of updated workshop contributions and brand new papers written after STEP 2003 was attended by workshop participants.

STEP 2003 Workshops

The following workshops were part of STEP 2003:

- Defect Detection in Distributed Software Systems, chaired by Rob Kusters, Jos Trienekens, Jef Jacobs, and Jan van Moll
- Software Test and Reliability Estimation Process, chaired by Aditya Mathur and Kai-Yuan Cai
- Software Development Methodologies for Distributed Systems, chaired by Zhou Zhiying and Scott Tilley
- Expected Level of Understanding of SWEBOK Topics, chaired by Pierre Bourque, François Coallier, and Juan Garbajosa
- Enterprise Application Integration, chaired by Dennis Smith and Evan Mamas
Testing processes for both software and systems was the focus of two workshops (Software Test and Reliability Estimation Process/System Testing and Validation).

Two workshops had the theme of distributed systems with a focus on software development methodologies and defect detection (Defect Detection in Distributed Software Systems/Software Development Methodologies for Distributed Systems).

One workshop focused on applying Bloom’s taxonomy in the SWEBOK (Expected Level of Understanding of SWEBOK Topics).

The workshop on “Where Is the Evidence? Empirical Practices in Software Engineering” focused on how we can ascertain that a given method or practice does bring benefit—and to what extent.

One workshop, Enterprise Application Integration, focused on enterprise architecture issues.

One workshop, eHealth Software, Systems and Networks, focused on integration issues and privacy issues.

One workshop, Interdisciplinary Software Engineering, focused on software evolution, risk management and complexities in interdisciplinary software engineering.

Finally the last workshop, Software Analysis and Maintenance, focused on practices, tools, and tool interoperability.

**Future Workshops**

The STEP 2003 workshops covered a significant part of the potential topics identified in the call for participation.

Although software engineering is maturing in some aspects, many areas of the discipline are still undergoing evolution. This will ensure a continuing potential for professional events like STEP.

**Conclusion**

STEP 2003 was a very successful event and we would like to thank the workshop organizers and participants for their hard work and contributions.

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