TAP 2010

4th International Conference on Tests and Proofs





July 1 - 2, 2010, Malaga, Spain

Part of TOOLS Federated Conferences (TOOLS Europe 2010, SC 2010, ICSMP 2010, TAP 2010)

Call for papers

The TAP conference is devoted to the convergence of proofs and tests. It combines ideas from both sides for the advancement of software quality.

To prove the correctness of a program is to demonstrate, through impeccable mathematical techniques, that it has no bugs; to test a program is to run it with the expectation of discovering bugs. The two techniques seem contradictory: if you have proved your program, it's fruitless to comb it for bugs; and if you are testing it, that is surely a sign that you have given up on any hope to prove its correctness.

Accordingly, proofs and tests have, since the onset of software engineering research, been pursued by distinct communities using rather different techniques and tools.

And yet the development of both approaches leads to the discovery of common issues and to the realization that each may need the other. The emergence of model checking has been one of the first signs that contradiction may yield to complementarity, but in the past few years an increasing number of research efforts have encountered the need for combining proofs and tests, dropping earlier dogmatic views of incompatibility and taking instead the best of what each of these software engineering domains has to offer.

The TAP conference aims to bring together researchers and practitioners working in the converging fields of testing and proving, and will offer a generous allocation of panels and informal discussions.

Topics of interest include:

- Generation of test data, oracles, or preambles by deductive techniques such as theorem proving, model checking, symbolic execution, constraint logic programming, etc.
- Generation of specifications by deduction
- Verification techniques combining proofs and tests
- Program proving with the aid of testing techniques
- Transfer of concepts from testing to proving (e.g., coverage criteria)
- Automatic bug finding
- Formal frameworks
- Tool descriptions and experience reports
- Case studies

Submissions:

- Research papers: full papers of not more than 16 pages in LNCS format, which have to be original, unpublished and not submitted elsewhere.
- Short presentations of work in progress, industrial experience reports and tool demonstrations. An extended abstract of not more than 6 pages is expected and will be reviewed.

All papers will be published in Springer's LNCS series and they will be available at the conference. Authors of selected papers of the conference will be invited to submit extended versions to a special section of the **Software Quality Journal** on Tests and Proofs.

For news and further details check: http://www.st.cs.uni-saarland.de/tap2010

Important Dates: Submission of abstracts: Friday, January 29, 2010 Submission of papers: Friday, February 5, 2010

Notification of acceptance: March 22, 2010 Camera-ready papers due: April 5, 2010 Dates of conference: July 1 – 2, 2010

Keynote Speakers :

Mike Ernst, U. of Washington Nachi Nagappan, MS Research

Conference Chairs:

Yuri Gurevich Bertrand Meyer

Program Chairs:

Gordon Fraser Angelo Gargantini

Program Committee:

Bernhard K. Aichernig Paul Ammann Bernhard Beckert Dirk Beyer Koen Claessen John A. Clark Catherine Dubois Carlo Furia Patrice Godefroid Martin Gogolla Arnaud Gotlieb **Reiner Haehnle** Bart Jacobs Victor Kuliamin Karl Meinke Manuel Nunez Sam Owre Doron Peled Wolfram Schulte Yannis Smaragdakis Assia Touil T.H. Tse

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