2007


Z. Q. Zhou
University of Wollongong, zhiquan@uow.edu.au

B. Scholz
University of Sydney

G. Denaro
Universita di Milano-Bicocca, Italy

Publication Details

Abstract
As computer systems are permeating our society in daily life and are performing an increasing number of critical tasks, research in software testing and analysis has become of paramount importance. Although we are currently not able to prove program correctness for real-world applications, rigorous software development processes in combination with testing provides us with confidence in the quality of software. Software testing and analysis, however, is a very involved task. As the size and complexity of software continue to grow, manual testing becomes very tedious. Automation of software testing and tool support for testing, therefore, have been emerging as a key technology to quality assurance of today’s software industry. As research in software testing and analysis has become increasingly active, there is also a growing trend towards combining formal methods and informal techniques for program verification.

Disciplines
Physical Sciences and Mathematics

Publication Details

This conference paper is available at Research Online: http://ro.uow.edu.au/infopapers/476

Zhi Quan Zhou  
School of IT & Computer Science  
University of Wollongong  
Wollongong  
NSW 2522  
Australia  
Email: zhiquan@uow.edu.au

Bernhard Scholz  
School of Information Technologies  
The University of Sydney  
Sydney  
NSW 2006  
Australia  
Email: scholz@it.usyd.edu.au

Giovanni Denaro  
Dipartimento di Informatica Sistemistica e Comunicazione  
Università di Milano-Bicocca  
Via Bicocca degli Arcimboldi 8  
Milano, MI 20126, Italy  
Email: denaro@disco.unimib.it

As computer systems are permeating our society in daily life and are performing an increasing number of critical tasks, research in software testing and analysis has become of paramount importance. Although we are currently not able to prove program correctness for real-world applications, rigorous software development processes in combination with testing provides us with confidence in the quality of software. Software testing and analysis, however, is a very involved task. As the size and complexity of software continue to grow, manual testing becomes very tedious. Automation of software testing and tool support for testing, therefore, have been emerging as a key technology to quality assurance of today’s software industry. As research in software testing and analysis has become increasingly active, there is also a growing trend towards combining formal methods and informal techniques for program verification.

The HICSS Minitrack Automated Software Testing and Analysis: Techniques, Practices and Tools is within the Software Technology Track. The aim of this Minitrack is to bring together researchers and practitioners to present their research results and exchange ideas and experience in software testing and analysis, especially in their automation and/or tool support, and in the combination of formal methods and informal techniques.

This Minitrack received eight submissions, one of which was withdrawn later. The Program Committee has selected five papers. Each submission was reviewed by at least three referees, and papers were selected in the later stage of a two-week discussion phase. We would like to thank the members of the Program Committee for their hard work.

The accepted papers were from the following institutions and companies around the world: ETH Zurich (Switzerland), AXA Rosenberg (USA), Indian Institute of Technology Kanpur (India), Hewlett-Packard Laboratories (USA), Swinburne University of Technology (Australia), The University of Hong Kong (Hong Kong), East China Normal University (China), University of Perpignan (France), CNRS (France), and The University of Manchester (UK).

Minitrack Program Committee

Johann Blieberger, Vienna University of Technology, Austria  
Bernd Burgstaller, University of Sydney, Australia  
Bill Bush, Sun Microsystems, USA  
Licia Capra, University College London, UK  
T.Y. Chen, Swinburne University of Technology, Australia  
S.C. Cheung, Hong Kong University of Science and Technology, Hong Kong  
Rance Cleaveland, University of Maryland, USA  
Wolfgang Grieskamp, Microsoft Research, USA  
Daniel Hoffman, University of Victoria, Canada  
Sarfraz Khurshid, The University of Texas at Austin, USA  
Michael R. Lyu, Chinese University of Hong Kong, Hong Kong  
Leonardo Mariani, University of Milano - Bicocca, Italy  
Alessandro Orso, Georgia Institute of Technology, USA  
Mauro Pezzè, University of Milano - Bicocca, Italy  
Vugranam Sreedhar, IBM T.J. Watson Research Center, USA  
Willem Visser, NASA Ames Research Center, USA  
Tao Xie, North Carolina State University, USA