Second International Workshop on Automation of Software Test

(AST 2007)

Minneapolis, Minnesota, USA
20 - 26 May 2007
# Table of Contents

**Second International Workshop on Automation of Software Test (AST 2007)**

## Workshop Organization

## Program Co-Chairs’ Message

## Keynote Address

Automated Test Data Generation Using Search Based Software Engineering ................................................................. 1  
*Mark Harman*

## Test Generation and Execution

Automated Generation of Test Cases Using Model-Driven Architecture ......................................................... 3  
*A. Z. Javed, P. A. Strooper, and G. N. Watson*

Automatic Test Data Generation for XML Schema-Based Partition Testing .......................................................... 10  
*Antonia Bertolino, Jinhua Gao, Eda Marchetti, and Andrea Polini*

Towards a Framework for Differential Unit Testing of Object-Oriented Programs .................................................... 17  
*Tao Xie, Kunal Taneja, Shreyas Kale, and Darko Marinov*
Domain Specific Techniques

An Improved Approach to Passive Testing of FSM-Based Systems
Hasan Ural, Zhi Xu, and Fan Zhang

Coverage-Based Testing on Embedded Systems
X. Wu, J. Jenny Li, D. Weiss, and Y. Lee

MobileTest: A Tool Supporting Automatic Black Box Test for Software on Smart Mobile Devices
Jiang Bo, Long Xiang, and Gao Xiaopeng

Automating Embedded Software Testing on an Emulated Target Board
Jooyoung Seo, Ahyoung Sung, Byoungju Choi, and Sunghong Kang

Testing Dynamic Adaptation in Distributed Systems
Karun N. Biyani and Sandeep S. Kulkarni

Case Studies and Experiments

Automated Testing of Timeliness: A Case Study
Robert Nilsson and Jeff Offutt

Automated Measure of Structural Coverage for LUSTRE Programs: A Case Study
Abdesselam Lakehal and Ioannis Parissis

Random Generation of Test Inputs for Implicitly Defined Subdomains
John A. Murphy and David Coppit

Author Index