2018 ACM/IEEE 11th International Workshop on Search-Based Software Testing SBST 2018

Table of Contents

Message from the ICSE 2018 General Chair	vii
Message from the SBST 2018 Co-Chairs	X
Committees for SBST 2018	xii
ICSE 2018 Sponsors and Supporters	xiv
Keynote I	
Reynote 1	
Predictive Analytics for Software Testing	1
Technical Session I	
Multifaceted Test Suite Generation Using Primary and Supporting Fitness Functions	2
Search-Based Optimization for the Testing Resource Allocation Problem: Research Trends and	
Opportunities	6
Roberto Pietrantuono (Università di Napoli Federico II) and Stefano Russo (Università di Napoli Federico II)	
An Effective Approach for Regression Test Case Selection Using Pareto Based Multi-Objective Harmony	
Search Ankur Choudhary (Amity University Uttar Pradesh), Arun Prakash Agrawal (Amity University Uttar Pradesh), and Arvinder Kaur (Guru Gobind Singh Indraprastha University)	13
Tutorial	
Evaluating Search-Based Techniques with Statistical Tests	21

Tool Competition

Java Unit Testing Tool Competition - Sixth Round
T3 @SBST2018 Benchmark, and How Much We Can Get from Asemantical Testing
EvoSuite at the SBST 2018 Tool Competition 3. Gordon Fraser (University of Passau), José Miguel Rojas (University of Leicester), and Andrea Arcuri (Westerdals Oslo ACT)
Keynote II
Testing and Continuous Integration at Scale: Limits, Costs, and Expectations
Technical Session II
From Operational to Declarative Specifications Using a Genetic Algorithm Facundo Molina (CONICET and University of Rio Cuarto), Renzo Degiovanni (University of Rio Cuarto), Germán Regis (University of Rio Cuarto), Pablo Castro (CONICET and University of Rio Cuarto), Nazareno Aguirre (CONICET and University of Rio Cuarto), and Marcelo Frias (CONICET and Buenos Aires Institute of Technology)
To Call, or Not to Call: Contrasting Direct and Indirect Branch Coverage in Test Generation
Generating Test Input with Deep Reinforcement Learning
Technical Session III
An Empirical Analysis of the Mutation Operator for Run-Time Adaptive Testing in Self-Adaptive Systems
On the Effect of Object Redundancy Elimination in Randomly Testing Collection Classes
Author Index