

Table of Contents

Testing: Academic & Industrial Conference – Practice and Research Techniques

TAIC PART 2008

| | |
|----------------------------------|-----|
| Message from General Chairs..... | vii |
| Program Committee | ix |

Invited Talks

| | |
|--|----|
| The Role of Empiricism in Improving the Reliability of Future Software | x |
| <i>Les Hatton</i> | |
| Software Testing for the Home Entertainment Industry: We Know Where We Started, but Where is It Going? | xi |
| <i>David Vandervoort</i> | |

Paper Session 1 - Research

| | |
|--|----|
| Web Services Composition Testing: A Strategy Based on Structural Testing of Parallel Programs..... | 3 |
| <i>André Takeshi Endo, Adenilso da Silva Simão, Simone do Rocio Senger de Souza, and Paulo Sergio Lopes de Souza</i> | |
| Exploring the Relationship of a File's History and Its Fault-Proneness: An Empirical Study..... | 13 |
| <i>Timea Illes-Seifert and Barbara Paech</i> | |
| Alternating GUI Test Generation and Execution..... | 23 |
| <i>Xun Yuan and Atif M. Memon</i> | |

Paper Session 2 - Industry Challenge

| | |
|--|----|
| Testing Challenges of Maritime Safety and Security Systems-of-Systems..... | 35 |
| <i>Alberto González, Éric Piel, Hans-Gerhard Gross, and Maurice Glandrup</i> | |
| Test Axioms as Thinking Tools | 40 |
| <i>Paul Gerrard</i> | |

Paper Session 3 - Industry Experience

| | |
|---|----|
| Selection, Evaluation and Generation of Test Cases in an Industrial Setting: A Process and a Tool | 47 |
| <i>Nicolas Guelfi and Benoît Ries</i> | |
| Abandoning Proprietary Test Tools for Graphical User Interface Verification | 52 |
| <i>Matthew Nicolas Kreeger and Nicholas Lativy</i> | |

Paper Session 4 - Tools

| | |
|--|----|
| ESTP: An Experimental Software Testing Platform..... | 59 |
| <i>Xin Feng, Simon Marr, and Tony O'Callaghan</i> | |
| Supporting Security Testers in Discovering Injection Flaws | 64 |
| <i>Sven Törpe, Andreas Poller, Jan Trukenmüller, Jürgen Repp, and Christian Bornmann</i> | |
| Feedback-Based Specification, Coding and Testing with JWalk..... | 69 |
| <i>Anthony J.H. Simons, Neil Griffiths, and Christopher Thomson</i> | |

Paper Session- Fast Abstracts

Tool Demonstration

Paper Session 5 - Industrial Experience

| | |
|--|----|
| Improving Fault Injection of Soft Errors Using Program Dependencies | 77 |
| <i>Gustav Munkby and Sibylle Schupp</i> | |
| Enhancing Test Driven Development with Model Based Testing and Performance Analysis..... | 82 |
| <i>Sebastian Wieczorek, Alin Stefanescu, Mathias Fritzsche, and Joachim Schnitter</i> | |

Paper Session 6 - Tools

| | |
|---|----|
| WebVizOr: A Visualization Tool for Applying Automated Oracles and Analyzing Test Results of Web Applications | 89 |
| <i>Sara Sprenkle, Holly Esquivel, Barbara Hazelwood, and Lori Pollock</i> | |
| MILU: A Customizable, Runtime-Optimized Higher Order Mutation Testing Tool for the Full C Language..... | 94 |
| <i>Yue Jia and Mark Harman</i> | |
| GUI Testing Made Easy | 99 |
| <i>Alex Ruiz and Yvonne Wang Price</i> | |

Paper Session 6- Fast Abstracts

| | |
|--------------------------|------------|
| Author Index..... | 104 |
|--------------------------|------------|