TAIC PART Program

Tuesday

09:00 - 09:30 Welcome (Mark Harman & Phil McMinn)
09:30 - 10:30 Keynote: Bill Woodworth (IBM)
10:30 - 11:00 Questions and discussion ~ Chair: Mark Harman
11:00 - 11:30 Coffee
11:30 - 13:00 Paper Session 1 ~ Chair: Rob Hierons (Brunel University)

Motivation for Testing

11:30 Justifying Testing in the 21st Century
Ian Gilchrist (IPL Ltd.)
11:50 Questions and discussion

Fault Prediction

12:00 Generating a Test Strategy with Bayesian Networks, and Common Sense
Jean-Jacques Gras, Elena Pérez-Miñana and Rishabh Gupta (Motorola)
12:20 On the Automation of Software Fault Prediction
Thomas Ostrand and Elaine Weyuker (AT&T)
12:40 Questions and discussion

13:00 - 14:00 Lunch
14:00 - 15:30 Walk
15:30 - 16:00 Tea
16:00 - 18:00 Paper Session 2 ~ Chair: Mary Jean Harrold (Georgia Institute of Technology)

Automated Inference and Abstraction

16:00 Identifying State Transitions and their Functions in Source Code
Neil Walkinshaw, Kirill Bogdanov, Mike Holcombe (University of Sheffield)
16:20 Integration Testing of Components Guided by Incremental State Machine Learning
Keqin Li, Roland Groz (LSR-IMAG), Muzammil Shahbaz (France Télécom)
16:40 Questions and discussion

PhD papers

17:00 Incremental Inference of Black-Box Components to support Integration Testing
Muzammil Shahbaz (France Télécom)
17:15 Feedback and questions
17:30 AutoAbstract: Problem Statement and Hypothetical Solutions
Shaukat Ali (University of Sheffield)
17:45 Feedback and questions
19:00 Dinner
Wednesday

09:00 - 10:30 Paper Session 3 ~ Chair: Ian Gilchrist (IPL Ltd.)

Testing in Context

9:00  Towards Deploying Model-Based Testing with a Domain-Specific Modeling Approach  
Mika Katara, Antti Kervinen, Mika Maunumaa, (Tampere University of Technology) Tuula Pääkkönen (Nokia Technology Platforms) and Mikko Satama (Tampere University of Technology)

9:20  TRex - The Refactoring and Metrics Tool for TTCN-3 Test Specifications  
Paul Baker, Dominic Evans (Motorola), Jens Grabowski, Helmut Neukirchen, Benjamin Zeiss (University of Göttingen)

9:40  A test-oriented life-cycle production strategy for building embedded biomedical applications  
James Miller (University of Alberta), Mike Smith, Jingwen Chen, Juan Qiao, Fang Huang (University of Calgary) and Marc Roper (University of Strathclyde).

10:00  Questions and discussion

10:30 – 11:00 Coffee

11:00 – 13:00 Paper Session 4 ~ Chair: Marc Roper (University of Strathclyde)

Techniques

11:00  Using program data-state diversity in test data search  
Mohammad Alshraideh and Leonardo Bottaci (University of Hull)

11:20  Testing the Implementation of Business Rules using Intensional Database Tests  
David Willmor and Suzanne Embury (University of Manchester)

11:40  Questions and discussion

PhD papers

12:00  Generation of Conformance Test Suites for Compositions of Web Services Using Model Checking  
José García-Fanjul, Claudio De la Riva and Javier Tuya (University of Oviedo)

12:15  Feedback and questions

12:30  Enabling Run-Time System Verification through Built-In Testing  
Daniel Brenner

12:45  Feedback and questions

13:00 - 14:00 Lunch

14:00 - 15:30 Paper Session 5 ~ Chair: Joachim Wegener (DaimlerChrysler)

Techniques

14:00  MaTRIX: Maintenance-Oriented Test Requirements Identifier and Examiner  
Taweesup Apiwattanapong, Raul Santelices, Pavan Kumar Chittimalli, Alessandro Orso, Mary Jean Harrold (Georgia Institute of Technology)

14:20  Extending Software Integration Testing Using Aspects in Symbian OS  
Jani Pesonen (Nokia)
14:40 Improving Testing Efficiency using Cumulative Test Analysis
Ian Holden and Dave Dalton (IBM)

15:00 Questions and discussion

15:30 - 16:00 Tea

16:00 - 18:00 ‘Speed Dating’ ~ Chair: Mark Harman

19:00 Dinner

Thursday

09:00 – 10:00 Keynote: John Hatcliff (Kansas State University)

10:00 – 10:30 Questions and discussion ~ Chair: Mark Harman

10:30 - 11:00 Coffee

11:00 - 13:30 Paper Session 6 ~ Chair: Mike Holcombe (University of Sheffield)

Empirical Studies

11:00 A Framework for Comparing Efficiency, Effectiveness and Applicability of Software Testing Techniques
Sigrid Eldh (Ericsson), Hans Hansson, Sasikumar Punnekkat, Anders Pettersson and Daniel Sundmark (Mälardalen University)

11:20 On the Testing Maturity of Software Producing Organizations
Mats Grindal (University of Skövde), Jeff Offutt (George Mason University) and Jonas Mellin (University of Skövde)

11:40 The effectiveness of refactoring based on a compatibility testing taxonomy and a dependency graph
Steve Counsell, Robert Hierons (Brunel University), Rajaa Najjar, George Loizou, and Youssef Hassoun (Birkbeck College, London)

12:00 Questions and discussion

PhD Papers

12:30 Delayed Failures in Software Using High Volume Automated Testing
Jeremy Gardiner (Cranfield University)

12:45 Feedback and questions

13:00 Empirical Assessment of Test-First Approach
Liang Huang and Mike Holcombe (University of Sheffield)

13:15 Feedback and questions

13:30 - 14:30 Lunch

14:30 - 15:30 Paper Session 7 ~ Chair: Phil McMinn
Case Studies

14:30 Testing a Datawarehouse - An Industrial Challenge
Harry Sneed (ANECON)

14:50 Use Case-Based Acceptance Testing of a Large Industrial System: Approach and Experience Report
Serguei Roubtsov and Petra Heck (Eindhoven University of Technology)

15:10 Questions and discussion

15:30 Voting for Best Presentation

16:00 Awards and Closing Comments (Mark Harman & Phil McMinn)

17:00 Close