AST 2010
Fifth International Workshop on Automation of Software Test

http://www.cs.allegheny.edu/ast2010/

PROGRAM

Monday 03 May

8:00 – 8:50  Registration
8:50 – 9:00  Welcome and opening (Chair: W.K. Chan)
9:00 – 10:00 Keynote (Chair: Gregory M. Kapfhammer)
    Willem Visser
    Finding Important Bugs is not Easy

10:00 – 12:00 S1: Test Artifacts Generation (Chair: John Hughes)
10:00 – 10:25 Abstract Path Testing with PathCrawler (Regular Paper)
    Nicky Williams

10:25 – 10:55 Morning break
10:55 – 11:20 Structural coverage of feasible code (Regular Paper)
    Mauro Baluda, Pietro Braione, Giovanni Denaro and Mauro Pezze

11:20 – 11:45 Constraint-based Test Database Generation for SQL Queries (Regular Paper)
    Claudio de la Riva, María José Suárez-Cabal and Javier Tuya

11:45 – 12:10 Automated Test Case Generation for Combinatorial Testing - Practices and Experiences (Case Study Presentation)
    Peter Zimmerer
12:10 – 12:30  **Charette Session I** (Chair: Workshop Co-Chairs)

*Identification of key challenges in software integration testing*

12:30 – 13:30  **Lunch**

13:30 – 15:10  **S2: System/Black-Box Testing** (Chair: Henry Muccini)

13:30 – 13:55  **Generation of Executable Test Cases Based on Behavioral UML System Models** (Case Study Paper)

*Christian Schwarzl and Bernhard Peischl*

13:55 – 14:20  **Test Automation on Mobile Device** (Regular Paper)

*Liu Zhifang, Liu Bin and Gao Xiaopeng*

14:20 – 14:45  **Ranking Programs using Black Box Testing** (Regular Paper)

*Koen Claessen, John Hughes, Michał Pałka, Nick Smallbone and Hans Svensson*

14:45 – 15:10  **Pattern-based Generation of Test Plans for Open Distributed Processing Systems** (Regular Paper)

*Baris Güldali, Stefan Sauer, Peter Winkelhane, Holger Funke and Michael Jahnich*

15:10 – 17:15  **S3: Test Tools and Environment** (Chair: Wolfram Schulte)

15:10 – 15:35  **Automating Software Tests with Partial Oracles in Integrated Environments** (Case Study Paper)

*Rene Just and Franz Schweiggert*

15:35 – 16:00  **Afternoon break**

16:00 – 16:25  **Automatic Detection of Previously-Unseen Application States for Deployment Environment Testing and Analysis** (Regular Paper)

*Christian Murphy, Moses Vaughan, Waseem Ilahi and Gail Kaiser*

16:25 – 16:50  **Property Driven Development in Erlang, by Example** (Case Study Paper)

*Samuel Rivas, Miguel Angel Fransisco and Victor M. Gulias*

16:50 – 17:15  **Systematic Testing of Refactoring Tools** (Poster)

*Andreas Thies and Friedrich Steimann*

17:15 – 18:15  **Charette Session II** (Chair: Program Co-Chairs)

*Identification of R&D pathway for each challenge*
**Tuesday 04 May**

9:00 – 9:05 **Welcome** (Chair: Gregory M. Kapfhammer)

9:05 – 10:05 **Keynote** (Chair: Christof J. Budnik)

Steve Quam

*High-ROI Customer Relevant Automated Testing*

10:05 – 12:00 **S4: Unit/Source Code Testing** (Chair: Paul Strooper)

10:05 – 10:30 **Automating Performance Testing of Interactive Java Applications**

(Regular Paper)

*Milan Jovic Andrea Adamoli, Dmitrijs Zaparanuks and Matthias Hauswirth*

10:30 – 11:00 **Morning break**

11:00 – 11:25 **Partitioning of pre-conditions and post-conditions to design effective tests and carry out Automated debugging** (Case Study Presentation)

*PVR Murthy*

11:25 – 11:50 **Automatically Extracting Mock Object Behavior from Design by Contract Specification for Test Data Generation** (Regular Paper)

*Stefan J. Galler, Andreas Maller and Franz Wotawa*

11:50 – 12:15 **Using Temporal Relations to Specify and Test an Instant Messaging Server** (Regular Paper)

*John Hughes, Ulf Norell and Jérôme Sautret*

12:15 – 12:30 **Charette Session III** (Chair: Workshop Co-Chairs)

*Finalization of presentations*

12:30 – 13:30 **Lunch**

13:30 – 15:00 **S5: Model-Driven Testing** (Chair: Gregory M. Kapfhammer)

13:30 – 13:55 **Model-Based Testing in Industry -- A Case Study with Two MBT Tools**

(Case Study Paper)

*Monalisa Sarma, P.V.R. Murthy, Sylvia Jell and Andreas Ulrich*

13:55 – 14:20 **Model-Based Testing of Multiple GUI Variants Using the GUI Test Generator** (Regular Paper)

*Duc Hoai Nguyen, Paul Strooper and Jorn Guy Suess*

14:20 – 14:45 **Calculating the Usage Probabilities of Statistical Usage Models by Constraints Optimization** (Regular Paper)

*Winfried Dulz, Reinhard German, Stefan Holpp and Helmut Götz*
14:45 – 16:30  S6: Defect Injection and Detection (Chair: Christof J. Budnik)
14:45 – 15:10  Automating the Mutation Testing of Aspect-Oriented Java Programs
               (Regular Paper)
               Fabiano Ferrari, Elisa Nakagawa, Awais Rashid and Jose Maldonado
15:10 – 15:35  An Effective Method to Control Interrupt Handler for Data Race
               Detection (Regular Paper)
               Makoto Higashi, Tetsuo Yamamoto, Yasuhiro Hayase, Takashi Ishio
               and Katsuro Inoue
15:35 – 16:05  Afternoon break
16:05 – 16:30  Towards Automating the Generation of Mutation Tests (Regular Paper)
               Mike Papadakis, Nicos Malevris and Maria Kallia
16:30 – 17:30  Charette Session IV (Chair: Workshop Co-Chairs)
               Presentations
17:30 – 17:35  Workshop close (Chair: W.K. Chan)
19:00 – 22:00  Workshop Dinner