**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**