The 13th CREST Open Workshop

Future Internet Testing (FITTEST) & Search Based Software Engineering (SBSE)

Programme of Day 1 – Thursday 12th May 2011

9:00   *Arrival, Coffee and Pastries*

9:30   **Welcome and Introductions**

9:45   **Mutation Testing**

Searching for Program Invariants using Genetic Programming and Mutation Testing

David White, University of York, UK

Search Based Mutation Testing

Mike Papadakis, Athens University of Economics and Business, Greece

Fault Injection Testing at Ericsson: Challenges for the |esearch community

Sigrid Eldh, Ericsson, Sweden

11:15 – 11:45 Coffee Break

11:45   **Requirements & Planning**

Sensitivity Analysis for Requirements using exact Optimization

Francisco Palomo Lozano, UCASE Software Engineering Research Group, University of Cádiz, Spain

Search Based Requirements Prioritization

Soo Ling Lim, CREST Centre, SSE Group, Department of Computer Science UCL, UK

Machine Learning for Software Effort Estimation

Leandro Minku, University of Birmingham, UK

13:15 – 14:15 Lunch

14:15   **Future directions in SBSE**

Learning from Hamming - Why the Big Problems Matter

Peter Bentley, Department of Computer Science, UCL, UK

Evolving a CUDA Kernel from an nVidia Template

Bill Langdon, CREST Centre, SSE Group, Department of Computer Science, UCL, UK

Evolving Reasons for Software Tests

Robert Feldt, Chalmers and Gothenburg University, Sweden

15:45 – 16:15 Coffee Break

16:15   **Future directions in SBSE**

A GP Approach to Shader Optimization

Westley Weimer, Department of Computer Science, University of Virginia, USA

Using Search Based Optimization for Chemical Engineering

Eric S Fraga, Department of Chemical Engineering, UCL, UK

Crunch: Search-based Hierarchy Generation for State Machines

Mathew Hall, Department of Computer Science, University of Sheffield, UK

17:45   **Discussions, Wrap Up and Close of Day 1**

18:30   *Dinner at the Terrace Restaurant at UCL*

http://crest.cs.ucl.ac.uk/cow/13

Programme of Day 2 – Friday 13th May 2011

9:00   Arrival, Coffee and Pastries

9:30   Future directions in SBSE

Motorola Software Engineering and Testing: Challenges for the Search Based Software Engineering Community

Paul Baker, Motorola, UK

Search Based Software Engineering for Model Based Development and Testing

Alin Stefanescu, University of Pitesti, Romania

Industrial Future Internet Testing Optimisation Needs

Emitzá Guzmán Ortega, FastFix project, Institut für Informatik, Technische Universität München, Germany

10:45 – 11:15 Coffee Break

11:15   Industrial Future Internet Testing Optimisation Needs

Search based Test Optimisation: An Industrial Perspective

Joachim Wegener, Berner & Mattner, Germany

Testing Challenges for the Research Community from IBM

Eitan Farchi, IBM Haifa Research Lab, Israel

Testing Challenges for the Research Community from Softeam

Cyril Ballagny, Softeam, France

12:45 – 13:45 Lunch

13:45   Working groups

15:15 – 15:45 Coffee Break

15:45   Future Directions in SBSE

Theoretical Foundations of SBSE

Xin Yao, University of Birmingham, UK

Automatically Documenting Program Changes

Westley Weimer, Department of Computer Science, University of Virginia, USA

Adventures in Quantum Programming Synthesis

John Clark, University of York, UK

17:15   Concluding remarks

17:30   Close