The 17th CREST Open Workshop  
Software Testing and Verification  
31st January – 1st February 2012  
Engineering Front Executive Suite, Roberts Building  

Programme  

+++++++++31 January – DAY 1+++++++++

10:00 Arrival, Coffee and Pastries

10:30 Welcome and Introductions  
Mark Harman, CREST Centre, SSE Group, Department of Computer Science UCL, UK

11:15 working title: Overview of Software testing  
Antonia Bertolino, Software Engineering Research Laboratory, ISTI - Istituto di Scienza e Tecnologie dell'Informazione A. Faedo, Italy

12:00 Experimental Program Analysis  
Andreas Zeller, Computer Science, Saarland University, Germany

12:30 working title: Automatically quantifying information leaks in software  
Pasquale Malacaria, Queen Mary University of London, UK

13:00 Sandwich lunch at the venue

14:00 Symbolic Crosschecking of Data-Parallel Code  
Cristian Cadar, Department of Computing, Imperial College London, UK

14:30 Using Information Theory to Avoid Fault Masking in Software Testing  
David Clark, CREST Centre, SSE Group, UCL, UK

15:00 The Yogi Project: Software property checking via verification and testing  
Aditya Nori, Microsoft Research India

15:30 Refreshments

16:00 IMUnit: Improved Multithreaded Unit Testing  
Darko Marinov, Department of Computer Science, University of Illinois, USA

16:30 Discussion: How can Verification and testing be combined in useful ways?  
Chaired by Mark Harman

18:00 End of day 1

From 18:15 Light dinner at the Marlborough Arms
February – Day 2

09:00 Arrival, Coffee and Pastries

09:30 Towards Automatic Synthesis of Software Verification Tools
Andrey Rybalchenko, Technische Universität München, Germany

10:00 working title: Interpolating the world
Daniel Kroening, University of Oxford, UK

10:30 Checking Atomicity of Composed Operations
Shmuel (Mooly) Sagiv, Tel Aviv University (TAU), Israel

11:00 Refreshments

11.30 Tool demonstration session
Dino Distefano: INFER: an automatic program verifier for Memory Safety of C programs
Kiran Lakhotia: The AUSTIN open source search based testing tool for C
Nadia Alshahwan: The SWAT search based testing tool for Web Applications
Yue Jia: The Milu open source mutation testing tool for C

13:00 Sandwich lunch at the venue

14.00 Discussion: Next steps to develop an agenda for testing and verification
Chaired by Peter O’Hearn

15:00 Refreshments

15.30 Automated System Testing of Real-Time Embedded Systems Based on Environment Models
Lionel Briand, Simula Research Laboratory, Norway

16.00 working title: Pex and Moles - Isolation and White box Unit Testing for .NET
Nikolai Tillmann, Microsoft Research USA

16.30 Learning-based runtime verification (joint work with Bernhard Steffen)
Tiziana Margaria-Steffen, University of Potsdam, Germany

17:00 Abstractions from Tests
Hongseok Yang, Computing Laboratory, University of Oxford, UK

17:30 Wrap-up: next steps

18.00 Close