

## The Oracle Problem for Automated Software Testing

21 - 22 May 2012

Engineering Front Executive Suite, Roberts Building, UCL

### Programme

+++++++21 May 2012 – DAY 1+++++++

**09:30** *Arrival, Coffee and Pastries*

**10:15** **Welcome and Introductions**

Mark Harman, CREST Centre, SSE Group, Department of Computer Science, UCL, UK

**11:00** **Overview of Oracles in Testing**

Shin Yoo, CREST Centre, SSE Group, Department of Computer Science, UCL, UK and Muzammil Shahbaz, University of Sheffield, UK

**11:30** *Refreshments*

**12:00** **Runtime monitoring and testing of cloud services**

Wolfgang Grieskamp, Google Inc., USA

**12:30** **Supporting Test Oracle Construction**

Matt Staats, Department of Computer Science and Engineering, University of Minnesota, USA

**13:00** *Sandwich lunch at the venue*

**14:00** **Testing is nothing but reckoning: An Empiricist Perspective on Testing**

Neil Walkinshaw, University of Leicester, UK

**14:30** **Mining anomaly detectors**

Paolo Tonella, Software Engineering (SE) Research Unit, Fondazione Bruno Kessler (FBK), Italy

**15:00** **Popular Delusions, Crowds, and the Coming Deluge: end of the Oracle?**

Robert Binder, System Verification Associates LLC, USA

**15:30** *Refreshments*

**16:00** **Automating Test Automation**

Saurabh Sinha, IBM Research, India

**16:30** **Oracles and testing at Microsoft**

Wofram Schulte, Microsoft Research, USA

**17:00** **Wrap up and discussion**

Mark Harman, CREST Centre, SSE Group, Department of Computer Science, UCL, UK

**18:00** **Close**

**18:15** *Light Dinner at the Marlborough Arms*

+++++++22nd May 2012 – Day 2+++++++

**09:30** *Arrival, Coffee and Pastries*

**10:00** **Oracles in TTCN-3 and UTP**

**Ina Schieferdecker, Fraunhofer-Institut für Offene Kommunikationssysteme (FOKUS), Germany**

**10:30** **When the earth is the oracle**

**Robert Nilsson, Google Inc., Switzerland**

**11:00** **Metamorphic Testing**

**Tsong Chen, Centre for Computing and Engineering Software Systems, Swinburne University of Technology, Australia**

**11:30** *Refreshments*

**12:00** **Oracle Problem: An Industrial Perspective**

**Andrea Arcuri, Schlumberger and Simula Research Laboratory, Norway**

**12:30** **Which Test Oracle Should I Use for Effective GUI Testing?**

**Atif Memon, Dept. of Computer Science, University of Maryland, USA**

**13:00** *Sandwich lunch at the venue*

**14:00** **Implicit oracles from software redundancy**

**Mauro Pezzè, University of Milano Bicocca, Italy and University of Lugano, Switzerland**

**14:30** **Carving invariants**

**Andreas Zeller, Computer Science, Saarland University, Germany**

**15:00** *Refreshments*

**15:30** **Mining web pages for realistic test inputs to lower oracle cost**

**Phil McMinn, University of Sheffield, UK**

**16:00** **Generating oracles with mutation testing and the crowd**

**Gordon Fraser, University of Sheffield, UK**

**16:30** **Wrap up**

**17:30** **Close**