

Machine Learning and Search Based Software Engineering (ML&SBSE)

+++++++30 January 2013 – DAY 1+++++++

10:00 Arrival, Coffee and Pastries

10:30 Welcome and Introductions

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

11:15 A overview of SBSE

Shin Yoo, CREST Centre, SSE Group, Department of Computer Science, UCL, UK

12:15 Multi-armed bandits and Monte-Carlo tree search for system control under uncertainty

Michele Sebag, Université Paris Sud, France

13:15 Sandwich lunch at the venue

14:15 Bandit algorithms for Online Linear Optimization

Nicolo Cesa-Bianchi, Dipartimento di Informatica, Università degli Studi di Milano, Italy

14:45 Discussion

15:00 Local Search for MAXSAT: Constant time moves and constant time lookahead for very large problems

Darrell Whitley, Department of Computer Science, Colorado State University, USA

15:30 Discussion

15:45 Refreshments

16:30 Active Learning for Multi-Objective Optimization

Andreas Krause, Learning & Adaptive Systems Group, ETH Zurich, Switzerland

17:00 Discussion

18:00 Wrap up

18:15 Light Dinner at the Marlborough Arms

Machine Learning and Search Based Software Engineering (ML&SBSE)

+++++++31 January 2013 2012 – Day 2+++++++

9:30 *Arrival, Coffee and Pastries*

10:00 **Characterizing the Windows Software Development Environment**
Brendan Murphy, Microsoft Research, Cambridge, UK

10:30 **Discussion**

10:45 **Over the Horizon: ML+SBSE = What?**
Tim Menzies, Lane Department of Computer Science & Electrical Engineering, West Virginia University, USA

11:15 **Discussion**

11:30 *Refreshments*

12:00 **Software Effort Estimation as a Multi-objective Learning Problem**
Leandro Minku, CERCIA, School of Computer Science, University of Birmingham, UK

12:30 **Discussion**

12:45 *Sandwich lunch at the venue*

13:45 **Machine Learning, the silver bullet?**
Ahmed E. Hassan, School of Computing, Queen's University, Canada

14:15 **Discussion**

14:30 **Assessing the predictive performance of machine learners in software engineering**
Martin Shepperd, Information Systems and Computing, Brunel University, UK

15:00 **Discussion**

15:15 *Refreshments*

15:45 **Sex as Gibbs Sampling: Modelling Evolution with a Tractable Markov Chain**
Chris Watkins, Department of Computer Science in Royal Holloway, University of London, UK

16:15 **Discussion**

16:30 **TBC**
David Silver, Department of Computer Science, UCL, UK

16.45 **Discussion**

17:00 **Wrap-up**

17:15 **Close**