Andrew Cropper a.cropper13@imperial.ac.uk

Education

PhD Computer Science, Imperial College London 10/2013 -
Supervisor: Professor Stephen Muggleton
Thesis: Efficient meta-interpretive learning of efficient programs

MSc Computer Science, University of Oxford 10/2010 - 10/2011
Supervisor: Dr Brian Harrington
Thesis: Modelling stock volume using Twitter

BSc Computer Science, Nottingham Trent University 10/2005 - 07/2009
Graduated with first-class honours
Supervisor: Dr Caroline Langensiepen
Dissertation: Scenes from a book

Experience

Visiting researcher, National Institute of Informatics, Tokyo, Japan 08/2015 - 09/2015
Supervisor: Professor Katsumi Inoue

Research intern, National Institute of Informatics, Tokyo, Japan 10/2014 - 12/2014
Supervisor: Professor Katsumi Inoue
Topic: Relationship between meta-interpretive learning and meta-level abduction

Research Assistant, University of Cambridge 07/2013 - 10/2013
Supervisor: Dr Eiko Yonkei
Topic: Distributed asynchronous graph algorithms

Research Engineer, MFG Labs, Paris, France 01/2012 - 07/2013

Software Engineer, Esendex, Nottingham 01/2010 - 10/2010

Software Engineer, Counter Solutions, Derbyshire 06/2007 - 10/2008

Publications

Conferences/workshops

[1] Andrew Cropper and Stephen H. Muggleton. "Learning Efficient Logical Robot Strategies Involving Composable Objects". In: *Proceedings of the Twenty-Fourth International Joint Conference on Artificial Intelligence, IJCAI 2015, Buenos Aires, Argentina, July 25-31, 2015*. Ed. by Qiang Yang and Michael Wooldridge. AAAI Press, 2015, pp. 3423–3429.

[2] Andrew Cropper. "Learning Efficient Logic Programs". In: *Proceedings of the Twenty-Fourth International Joint Conference on Artificial Intelligence, IJCAI 2015, Buenos Aires, Argentina, July 25-31, 2015*. Ed. by Qiang Yang and Michael Wooldridge. AAAI Press, 2015, pp. 4359–4360.

[3] Andrew Cropper and Stephen H. Muggleton. "Can predicate invention compensate for incomplete background knowledge?" In: *Proceedings of the 13th Scandinavian Conference on Artificial Intelligence*. In press. 2015.

[4] Andrew Cropper and Stephen H. Muggleton. “Logical minimisation of meta-rules within Meta-Interpretive Learning”. In: *Proceedings of the 24th International Conference on Inductive Logic Programming*. In press. Springer-Verlag, 2015.

[5] Andrew Cropper. “Identifying and inferring objects from textual descriptions of scenes from books”. In: *2014 Imperial College Computing Student Workshop, ICCSW 2014, September 25-26, 2014, London, United Kingdom*. Ed. by Rumyana Neykova and Nicholas Ng. Vol. 43. OASICS. Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, 2014, pp. 19–26.

Awards and grants

- *Machine Learning Journal* best student paper — ILP 2014
- National Institute of Informatics international internship program — 10/2014 - 12/2014
- Full BBSRC PhD case studentship — 10/2013 - 10/2016
- Syngenta fellowship — 10/2013 - 10/2016

Talks

- *Meta-interpretive learning of data transformation programs*, The 25th International Conference on Inductive Logic Programming, Kyoto, Japan, 2015.
- *Learning efficient logic programs*, Doctoral Consortium of the International Joint Conference on Artificial Intelligence 2015, Buenos Aires, Argentina, 2015.
- *Meta-interpretive learning normal logic programs*, Meeting on meta-interpretive learning, Imperial College London, UK, 2015.
- *Predicate invention in meta-interpretive learning*, Meeting on abductive and inductive reasoning, Wakayama University, Japan, 2014.
- *Can predicate invention in meta-interpretive learning compensate for incomplete background knowledge?*, The 24th International Conference on Inductive Logic Programming, Nancy, France, 2014.

Professional services

Reviewing

- 2014 Imperial College Computing Student Workshop

Other

- IJCAI 2015 Student volunteer