Andrew Cropper

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Education

PhD Computer Science, Imperial College London
Supervisor: Professor Stephen Muggleton
Thesis: Inductive learning of efficient logic programs

10/2013 -

MSc Computer Science, University of Oxford
Supervisor: Dr Brian Harrington
Thesis: Modelling stock volume using Twitter

10/2010 - 10/2011

BSc Computer Science, Nottingham Trent University
Graduated with first-class honours
Supervisor: Dr Caroline Langensiepen
Dissertation: Identifying and inferring objects from natural language text

10/2005 - 07/2009

Experience

Visiting researcher, National Institute of Informatics, Tokyo, Japan
Supervisor: Professor Katsumi Inoue

08/2015 - 09/2015

Research intern, National Institute of Informatics, Tokyo, Japan
Supervisor: Professor Katsumi Inoue
Topic: Comparing meta-interpretive learning and meta-level abduction

10/2014 - 12/2014

Research Assistant, University of Cambridge
Supervisor: Dr Eiko Yonkei
Topic: Distributed asynchronous graph algorithms

07/2013 - 10/2013

Research Engineer, MFG Labs, Paris, France
Topic: Machine learning large networks

01/2012 - 07/2013

Software Engineer, Esendex, Nottingham
Topic: Developed analytical tools to monitor business SMS traffic

01/2010 - 10/2010

Software Engineer, Counter Solutions, Derbyshire
Topic: Developed analytical tools to monitor database and web servers

06/2007 - 10/2008

Publications

Conferences

1. A. Cropper, A. Tamaddoni-Nezhad, and S.H. Muggleton. Meta-interpretive learning of data transformation programs. In *Proceedings of the 25th International Conference on Inductive Logic Programming*, ILP 2015. To appear.

2. A. Cropper and S.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, pp. 3423-3429.

3. A. 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, pp. 4359-4360.

4. A. Cropper and S.H. Muggleton. Can predicate invention compensate for incomplete background knowledge? In *Thirteenth Scandinavian Conference on Artificial Intelligence* - SCAI 2015, Halmstad, Sweden, November 5-6, 2015, pp. 27-36.

5. A. Cropper and S.H. Muggleton. Logical minimisation of meta-rules within meta-interpretive learning. In *Inductive Logic Programming - 24th International Conference*, ILP 2014, Nancy, France, September 14-16, 2014, Revised Selected Papers, pp. 62-75.

Workshops

1. C. Farquhar, G. Grov, A. Cropper, S.H. Muggleton, and A. Bundy. Typed meta-interpretive learning for proof strategies. *The 6th International Workshop on the use of AI in Formal Methods*, AI4FM 2015.

2. A. 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, 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
· Syngenta fellowship   10/2013 - 10/2017
· Full BBSRC PhD case studentship   10/2013 - 10/2016

Talks

· Can predicate invention compensate for incomplete background knowledge? Scandinavian Conference on Artificial Intelligence, Halmstad, Sweden, 11/2015.
· Meta-interpretive learning of data transformation programs, International Conference on Inductive Logic Programming, Kyoto, Japan, 08/2015.
· Learning efficient logical robot strategies involving composable objects. International Conference on Inductive Logic Programming, Kyoto, Japan, 08/2015.
· Learning efficient logical robot strategies involving composable objects. International Joint Conference on Artificial Intelligence, Buenos Aires, Argentina, 07/2015.
· Learning efficient logic programs, Doctoral Consortium of the International Joint Conference on Artificial Intelligence 2015, Buenos Aires, Argentina, 07/2015.
· Predicate invention in meta-interpretive learning, Meeting on abductive and inductive reasoning, Wakayama University, Japan, 12/2014.
· Logical minimisation of meta-rules within meta-interpretive learning, International Conference on Inductive Logic Programming, Nancy, France, 08/2014.
· Can predicate invention in meta-interpretive learning compensate for incomplete background knowledge?, International Conference on Inductive Logic Programming, Nancy, France, 08/2014.

- Identifying and inferring objects from textual descriptions of scenes from books, Imperial College Computing Student Workshop, London, United Kingdom, 08/2014.

Professional services

Reviewing

- 2014 Imperial College Computing Student Workshop

Other

- IJCAI 2015 Student volunteer