

Education

PhD Computer Science, Imperial College London	10/2013 -
Supervisor: Professor Stephen Muggleton	
Thesis: Inductive synthesis of efficient logic 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: Identifying and inferring objects from natural language text	

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: Compared meta-interpretive learning and meta-level abduction	
Research Assistant, University of Cambridge	07/2013 - 10/2013
Supervisor: Dr Eiko Yonkei	
Topic: Designed distributed asynchronous graph algorithms	
Research Engineer, MFG Labs, Paris, France	01/2012 - 07/2013
Topic: Designed and developed large-scale machine learning algorithms using Spark	
Software Engineer, Esendex, Nottingham	01/2010 - 10/2010
Topic: Developed C# analytical tools to monitor business SMS traffic	
Software Engineer, Counter Solutions, Derbyshire	06/2007 - 10/2008
Topic: Developed C# analytical tools to monitor database and web servers	

Publications

Conferences

- 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.
- 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.
- 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.
- 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.

- 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

- 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.
- 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