

Andrew Cropper

Email	andrew.cropper@cs.ox.ac.uk	
Education	PhD Computer Science , Imperial College London Supervisor: Professor Stephen Muggleton Thesis: Efficiently learning efficient programs	2017
	MSc Computer Science , University of Oxford Supervisor: Dr Brian Harrington Thesis: Predicting stock volume using Twitter	2011
	BSc Computer Science , Nottingham Trent University Graduated with first-class honours Supervisor: Dr Caroline Langensiepen Dissertation: Identifying and inferring objects from natural language	2009
Employment	Junior Research Fellow , Hertford College, University of Oxford Working on inductive logic programming	2018 -
	Research Assistant , University of Cambridge Worked with Dr Eiko Yonkei on distributed graph algorithms	2013
	Research Engineer , MFG Labs, Paris, France Designed large-scale distributed machine learning algorithms	2012 - 2013
	Software Engineer , Esendex, Nottingham Developed analytical tools to monitor SMS traffic	2010
	Software Engineer , Counter Solutions, Derbyshire Developed analytical tools to monitor servers	2007 - 2008
Research visits	Massachusetts Institute of Technology Worked with Professor Josh Tenenbaum on program induction	2016
	National Institute of Informatics, Tokyo, Japan Worked with Professor Katsumi Inoue on inductive logic programming	2014, 2015, 2017
Awards	<ul style="list-style-type: none">Junior research fellowship, Hertford College, University of Oxford<i>Machine Learning Journal</i> best student paperNational Institute of Informatics international internship programSyngenta fellowship	<div>2018</div> <div>ILP 2014</div> <div>2014</div> <div>2013</div>

Publications

Conferences

- A. Cropper and S.H. Muggleton. Learning higher-order logic programs through abstraction and invention. In *Proceedings of the 25th International Joint Conference Artificial Intelligence (IJCAI 2016)*, pages 1418-1424. IJCAI, 2016.
- A. Cropper and S.H. Muggleton. Learning efficient logical robot strategies involving composable objects. In *Proceedings of the 24th International Joint Conference Artificial Intelligence (IJCAI 2015)*, pages 3423-3429. IJCAI, 2015.
- 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 (ILP2015)*, pages 46-59. Springer-Verlag, 2015. LNAI 9046.
- C. Farquhar, G. Grov, A. Cropper, S.H. Muggleton, and A. Bundy. Typed meta-interpretive learning for proof strategies. In *Late Breaking Papers of the 25th International Conference on Inductive Logic Programming*, pages 17-32, 2015.
- 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 *Proceedings of the 24th International Conference on Inductive Logic Programming (ILP2014)*, pages 62-75. Springer-Verlag, 2015. LNAI 9046.

Workshops

- 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.

Extended abstracts

- A. Cropper. Logic-based inductive synthesis of efficient programs. In *Proceedings of the 25th International Joint Conference Artificial Intelligence (IJCAI 2016)*, pages 3980-3981. IJCAI, 2016.
- A. Cropper. Learning efficient logic programs. In *Proceedings of the 24th International Joint Conference Artificial Intelligence (IJCAI 2015)*, pages 4359-4360. IJCAI, 2015.

Invited talks

- Learning efficient logic programs, *Workshop on approaches and Applications of inductive programming*, Dagstuhl, Germany, October 2017.
- Learning higher-order logic programs, *Workshop on approaches and Applications of inductive programming*, Dagstuhl, Germany, October 2017.

- Learning efficient logic programs, *Machine Intelligence 20 workshop on human-like computing*, London, UK, October 2016.
- Logic-based learning of programs from input/output examples, UC Berkeley, USA, July 2016.
- Metagol, *Workshop on approaches and Applications of inductive programming*, Dagstuhl, Germany, October 2015.
- Predicate invention in meta-interpretive learning, *Meeting on abductive and inductive reasoning*, Wakayama University, Japan, November 2014.