

Department of Computing,  
Imperial College London,  
180 Queen's Gate,  
London, SW7 2AZ

**Education**

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|--|-------------------|
| PhD Computer Science, Imperial College London                              | 10/2013 -         |
| Supervisor: Professor Stephen Muggleton                                    |                   |
| Thesis: Efficiently learning 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: Identifying and inferring objects from natural language text |                   |

**Experience**

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|---|-------------------|
| 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: Comparing 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 |
| Topic: Machine learning large (billions of edges) networks            |                   |
| Software Engineer, Esendex, Nottingham                                | 01/2010 - 10/2010 |
| Topic: Developed analytical tools to monitor business SMS traffic     |                   |
| Software Engineer, Counter Solutions, Derbyshire                      | 06/2007 - 10/2008 |
| Topic: Developed analytical tools to monitor database and web servers |                   |

**Publications**

## Conferences

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

2. A. Cropper and S.H. Muggleton. Learning efficient logical robot strategies involving composable objects. *Proceedings of the 24th International Joint Conference on Artificial Intelligence, IJCAI 2015*.
3. A. Cropper. Learning efficient logic programs. *Proceedings of the 24th International Joint Conference on Artificial Intelligence, IJCAI 2015*.
4. A. Cropper and S.H. Muggleton. Can predicate invention compensate for incomplete background knowledge? *Proceedings of the 13th Scandinavian Conference on Artificial Intelligence, SCAI 2015*.
5. A. Cropper and S.H. Muggleton. Logical minimisation of meta-rules within meta-interpretive learning. *Proceedings of the 24th International Conference on Inductive Logic Programming, ILP 2014*.

#### 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. *2014 Imperial College Computing Student Workshop, ICCSW 2014*.

#### 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