

# Lecture Notes in Artificial Intelligence 7207

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# Inductive Logic Programming

21st International Conference, ILP 2011  
Windsor Great Park, UK, July 31 – August 3, 2011  
Revised Selected Papers

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# Preface

The ILP 2011 conference held in Cumberland Lodge, Great Windsor Park, marked 20 years since the first ILP workshop in 1991. During this period the conference has developed into the premier forum for work on logic-based machine learning. The format of the proceedings for the 21st International Conference of Inductive Logic Programming (ILP 2011) follows a similar format to that of previous conferences, and is particularly close to that used in ILP 2006. Submissions were requested in two phases. The first phase involved short papers (6 pages) which were then presented at the conference and posted on the conference website prior to the conference itself. In the second phase, reviewers selected papers for long paper submission (15 pages maximum). These were assessed by the same reviewers, who then decided which papers to include in the journal special issue and proceedings.

In the first phase there were 66 papers. Each paper was reviewed by three reviewers. Out of these, 31 were invited as long papers. Out of the long paper submissions five were selected for the *Machine Learning Journal* special issue and 24 were accepted for the proceedings. In addition, one paper was nominated by PC referees for the applications prize (the “Michie ILP Application Prize” sponsored by Syngenta Ltd.) and one for the theory prize (the “Turing ILP Theory Prize” sponsored by the *Machine Learning Journal*). The papers in the proceedings represent the diversity and vitality in present ILP research including ILP theory, implementations, probabilistic ILP, biological applications, sub-group discovery, grammatical inference, relational kernels, learning of Petri nets, spatial learning, graph-based learning, and learning of action models.

ILP 2011 was held at Cumberland Lodge in the UK from July 31 to August 3, 2011, under the auspices of the Department of Computing, Imperial College London. In addition to the many technical paper presentations, the invited talks this year were given by a distinguished group of artificial intelligence researchers, namely, Hector Geffner, Richard Sutton and Toby Walsh.

We gratefully acknowledge the contribution of Syngenta Ltd. in their support of the applications prize.

Finally, we would like to thank the many individuals involved in the preparation of the conference. These include the journal special issue organizer (Jianzhong Chen), the local organizer (Hiroaki Watanabe), and Francesca A. Lisi, who arranged independent refereeing of papers submitted by Imperial College authors. Lastly, special thanks are due to Bridget Gundry who supported the organization of the conference, website and the design and distribution of the poster.

March 2012

Stephen H. Muggleton  
Alireza Tamaddoni-Nezhad

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