Inductive Logic Programming: Inverse Resolution and Beyond

Stephen Muggleton
Oxford University Computing Laboratory

ABSTRACT

This talk is based on a paper which appears in the May 1995 issue of *New Generation Computing Journal* under the title "Inverse entailment and Progol." The paper is available as gzipped Postscript by anonymous ftp from

   ftp.comlab.ox.ac.uk

in file

   pub/Packages/ILP/Papers/InvEnt.ps.gz

The paper firstly provides a reappraisal of the development of techniques for inverting deduction, secondly introduces Mode-Directed Inverse Entailment (MDIE) as a generalization and enhancement of previous approaches, and thirdly describes an implementation of MDIE in the Progol system. Progol is implemented in C and also available by anonymous ftp (details in main paper). The reassessment of previous techniques in terms of inverse entailment leads to new results for learning from positive data and inverting implication between pairs of clauses.