

CONTENTS

PART ONE: Learning from Examples in the Presence of Noise

Induction in Noisy Domains <i>P. Clark, T. Niblett (Glasgow, UK)</i>	11
ASSISTANT 86: A Knowledge-Elicitation Tool for Sophisticated Users <i>B. Cestnik, I. Kononenko, I. Bratko (Ljubljana, Yugoslavia)</i>	31
Review of Five Empirical Learning Systems Within a Proposed Schemata <i>M. Gams, N. Lavrac (Ljubljana, Yugoslavia)</i>	46
Constructing Decision Trees in Noisy Domains <i>T. Niblett (Glasgow, UK)</i>	67
Combining Cross-Validation and Search <i>C.J.C.H. Watkins (Redhill, UK)</i>	79

PART TWO: Meta-Knowledge and Explanation in Learning

Is AI a Sub-Field of Computer Science — or is AI the Science of Explanations? <i>Y. Kodratoff (Paris, France)</i>	91
Learning Control Knowledge within an Explanation-Based Learning Framework <i>R. Desimone (Edinburgh, UK)</i>	107
Goal Regression with Opponent <i>J.F. Puget (Paris, France)</i>	121
Knowledge States and Meta-Knowledge Maintenance <i>P. Brazdil (Porto, Portugal)</i>	138

PART THREE: Studies of Special Mechanisms for Learning

Inductive Generalization: A Logical Framework <i>N. Helft (Marseille, France)</i>	149
Learning with Hilbert Cubes <i>J.G. Ganascia (Paris, France)</i>	158
The Extension Matrix Approach to Attribute Based Learning <i>J. Hong, C. Uhrich (Harbin, China; Urbana-Champaign, USA)</i>	172
Model-Driven Learning of Disjunctive Concepts <i>M. Manaao, Y. Kodratoff (Paris, France)</i>	183

PART FOUR: Learning in Complex Domains

Learning of Qualitative Models

I. Mozetic (Ljubljana, Yugoslavia) 201

Structuring Knowledge by Asking Questions

S. Muggleton (Glasgow, UK) 218

An Inductive Learning Approach to the Problem of Predicting a Protein's Secondary Structure from its Amino Acid Sequence

R.D. King (Glasgow, UK) 230