PROCEEDINGS OF THE FIRST INTERNATIONAL WORKSHOP ON MULTISTRATEGY LEARNING

Edited by

R. S. Michalski G. Tecuci

Proceedings of the First International Workshop on

MULTISTRATEGY LEARNING (MSL-91)

November 7-9, 1991 Harpers Ferry

Edited by Ryszard S. Michalski and Gheorghe Tecuci

Sponsored by the Office of Naval Research and the Center for Artificial Intelligence, George Mason University

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To obtain additional copies contact: Janet Holmes, Center for Artificial Intelligence

Email: jholmes@aic.gmu.edu

Tel: 703 993-1719 Fax: 703 993-3729

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Foreword

The papers in this volume were presented at the First International Workshop on Multistrategy Learning in Harpers Ferry, November 7-9, 1991. The workshop was sponsored by the Office of Naval Research and the Center for Artificial Intelligence at George Mason University.

The theme of the workshop, multistrategy learning, is a novel and very challenging topic in the field of machine learning. Multistrategy learning systems employ more than one strategy or paradigm in a learning process, and potentially can offer significant advantages over single-strategy systems. Since the types of input and acquired knowledge are more flexible, multistrategy learning systems potentially can be applied to a wide range of problems. The purpose of this workshop was to provide a forum in which researchers active in this field could present and discuss their work.

The papers have been grouped into six categories, according to their primary theme:

Theoretical and General Issues
Theory Revision
Strategy Selection
Integration of Symbolic and Subsymbolic Methods
Cognitive Models
Special Topics and Applications.

We are indebted to the organizations and many individuals who helped us in making this workshop possible.

We gratefully acknowledge the Office of Naval Research, particularly Dr. Alan Meyrowitz, for providing support for this workshop. The GMU Publications Office helped in the preparation and printing of the workshop proceedings. The GMU Center Artificial Intelligence provided organizational aid and all technical facilities.

Drs. Saul Amarel, Alan Meyrowitz, Michael Pazzani, and Andrew Sage have honored the workshop with invited presentations. Yves Kodratoff and Stan Matwin were the members of the team who originated the idea of the workshop. As Organizing Committee members they gave invaluable help by reviewing first the abstracts and then the submitted papers. They were prompt despite the unusually high volume of papers that fell on them. The members of the Program Committee and the auxiliary reviewers provided careful and timely reviews of the submitted papers. Their assistance was indispensable for insuring the papers' superior quality.

Bill Deichler, Janet Holmes and Cindy Young served as administrative managers. They diligently directed and executed many organizational aspects of the workshop. Jerzy Bala, Eric Bloedom, Michael Hieb, Ibrahim Imam, Ken Kaufman, Jayshree Sarma, Haleh Vafaie, and Janusz Wnek, research assistants of the GMU Center for Artificial Intelligence, worked very spiritedly in different task groups. Their work effected all aspects of the workshop. They were a great team, and our collaboration with them turned many organizational chores into an exciting adventure.

The success of the First International Workshop on Multistrategy Learning was due to the devotion, collaboration and dilligence of all involved. We sincerely thank everyone.

Ryszard S. Michalski Gheorghe Tecuci

Contents

I. Theoretical and General Issues	
Inferential Learning Theory as a Basis for Multistrategy Task-Adaptive Learning	*****
Learning Causal Patterns: Deliberately Overgeneralizing to Facilitate Transfer	19
Induction and the Organization of Knowledge Yves Kodratoff	34
Learning as Understanding the External World	49
Balanced Cooperative Modeling	63
A Common Knowledge Representation Integrating Learning Tools	8
Macro and Micro Perspectives of Multistrategy Learning Yoram Reich	97
II. Theory Revision	
A Multistrategy Approach to Theory Refinement	115
Improving Learning by Using Deep Models	131
Theory Completion using Knowledge-Based Learning Bradley L. Whitehall, Stephen C-Y. Lu and Robert E. Stepp	144
A Deductive-Inductive Method for Theory Revision	160
CLINT: a Multistrategy Interactive Concept Learner and Theory Revision System Luc De Raedt and Maurice Bruynooghe	175
Gemini: An Integration of Analytical and Empirical Learning	191
Combining Abduction and Theory Revision	207
III. Strategy Selection	
Using Introspective Reasoning to Select Learning Strategies	.217
Adaptive Strategy Selection for Concept Learning	.231
Selection of Learning Methods Using an Adaptive Model of Knowledge Utility	.247

IV. Integration of Symbolic and Subsymbolic Methods
Refining Symbolic Knowledge Using Neural Networks
Using the Genetic Algorithm to Train Time Dependent Behaviors in Neural Networks273 Hugo de Garis
Automated Rationalization
Integrating Symbolic and Subsymbolic Approaches in Learning Flexible Concepts289 Jianping Zhang
Improving the Performance of a Rule Induction System Using Genetic Algorithms305 Haleh Vafaie and Kenneth DeJong
Learning Noise Tolerant Classification Procedures by Integrating Inductive Learning316 and Genetic Algorithms Jerzy Bala, Kenneth DeJong, and Peter Pachowicz
An Experimental Comparison of Symbolic and Subsymbolic Learning Paradigms:
V. Cognitive Models
Feature Construction in Human and Machine Learning
Human Multistrategy Learning
VI. Special Topics and Applications
Automating Case Generation, Storage, and Retrieval in PRODIGY
Method Integration for Experience-Based Learning
Classifying for Prediction: A Multistrategy Approach to Predicting Protein Structure394 Lawrence Hunter
GEST: An Integrated Approach to Learning in Computer Vision
Learning by Plausible Reasoning and its Application to a Complex Musical Problem411 Gerhard Widmer
Acquiring the Second Tier: An Experiment in Learning Two-Tiered Concepts
Sequential Concept Learning: The SCL System
Author Index