Pavel B. Brazdil (Ed.)

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Volume Editor

Pavel B. Brazdil
LIACC-CIUP
Rua Campo Alegre 823, P-4100 Porto, Portugal

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Foreword

The European Conference on Machine Learning 1993 (ECML-93) continued with the tradition of earlier EWSLs *(European Working Sessions on Learning)*. The aim of these conferences is to provide a platform for presenting the latest results in the area of machine learning. Although ECML-93 is the first conference under this name, it can be considered as the sixth meeting of this kind in Europe.

The scientific programme included the presentation of invited talks, selected papers, and the presentation of ongoing work in poster sessions. The ECML-93 programme was complemented by several workshops on specific topics. The proceedings contain papers related to all these activities.

The first chapter of the proceedings contains two invited papers. The first one accompanies the invited talk of *Ross Quinlan* from the University of Sydney. The second one is by *Stephen Muggleton* giving an overview of the area of *Inductive Logic Programming (ILP)* that has become a very active area indeed. The paper of *Derek Sleeman* accompanying his invited lecture is available on request from the author. This paper covers some European research projects in the area of ML and their significance for the future development of ML.

The reader may be interested to note that the call for papers was very successful, resulting in 69 submissions. In order to maintain a good standard of the conference, all submissions were reviewed by at least two members of the programme committee or their close colleagues. Of course, only some of the submitted papers could actually be accepted.

The second chapter of the proceedings contains 18 scientific papers that have been accepted for the main sessions of the conference. It includes both long papers and some short ones which describe the results of ongoing work.

The third chapter contains 18 shorter position papers. In order not to make the proceedings too bulky, all the papers in this chapter have been condensed.

The final chapter of this book includes three overview papers related to the ECML-93 workshops / panels supplied by the organizers. As the workshops were organized independently of the main conference, this volume does not include any of the papers presented by its participants.

Organization of ECML-93

All matters related to the programme were coordinated by the Programme Chair who had the support of the ECML-93 Programme Committee. It included the following members of the ML or AI community:

Francesco Bergadano (Italy)
Ivan Bratko (Slovenia)
Pavel Brazdil (Portugal)
Ken de Jong (USA)
Luc de Raedt (Belgium)
Jean-Gabriel Ganascia (France)
Antonios Kakas (Cyprus)
Yves Kodratoff (France)
Nada Lavrac (Slovenia)
Ramón L. de Mantaras (Spain)
Katharina Morik (Germany)
Igor Mozetic (Austria)
Stephen Muggleton (UK)
Lorenza Saitta (Italy)
Jude Shavlik (USA)
Derek Sleeman (UK)
Maarten van Someren (Netherlands)
Walter Van de Velde (Belgium)
Rüdiger Wirth (Germany)

Several members of the Programme Committee have taken up an active role in the organization of ECML-93 workshops, and also invested a great deal of effort into reviewing papers. I wish to express my gratitude to all the people involved for this work.

ECML-93 was organized by the

Department of Medical Cybernetics and Artificial Intelligence,
University of Vienna

in cooperation with the

Austrian Research Institute for Artificial Intelligence.

Igor Mozetic and Gerhard Widmer have acted in the role of Local Chairs.

ECML-93 was supported by the following organizations:

Commission of the European Communities,
Vienna Convention Bureau,
Austrian Federal Ministry of Science and Research,
Austrian Society for Cybernetic Studies (OeSGK),
Austrian Society for Artificial Intelligence (OeGAI),
European Coordinating Committee for Artificial Intelligence (ECCAI).

The official patrons of ECML-93 were:

Austrian Federal Minister of Science and Research, Dr. Erhard Busek,
Mayor of Vienna, Dr. Helmut Zilk,
Rector of the University of Vienna, Prof. Dr. Alfred Ebenbauer.

I would like to thank, on behalf of all participants, all the sponsors and patrons who supported this venue.

I appreciate also the effort of the following members of the ML community who were solicited to help and accepted the task of reviewing papers:

E. Aimeur,
C. Tsatsarakis,
Siegfried Bell,
Y. Bennani,
Gilles Bisson,
Marko Bohanec,
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V. Corruble,
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Peter Edwards,
Werner Emde,
M.C. D'Erceville,
Attilio Giordana,
Matjaz Gams,
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Irene Stahl,
Joachim Stender,
Birgit Tausend,
Luís Torgo,
Tanja Urbancic,
Gilles Venturini,
Gerhard Widmer.
Stefan Weber.

Finally I wish all those who have acquired a copy of these proceeding many interesting insights into machine learning! Personally I believe that everyone's effort was well justified!

Porto, February 1993

Pavel B. Brazdil
Programme Chair of ECML-93

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