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Series Editors

Jaime G. Carbonell, Carnegie Mellon University, Pittsburgh, PA, USA
Jörg Siekmann, University of Saarland, Saarbrücken, Germany

Volume Editors

Petra Perner
Institut für Bildverarbeitung und angewandte Informatik
Arno-Nitzsche-Str. 45, D-04277 Leipzig, Germany
E-mail: ibaiperner@aol.com

Maria Petrou
School of Electronic Engineering, Information Technology and Mathematics
University of Surrey
Guilford, GU2 5XH, UK
E-mail: m.petrou@surrey.ac.uk

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Preface

The field of machine learning and data mining in connection with pattern recognition enjoys growing popularity and attracts many researchers. Automatic pattern recognition systems have proven successful in many applications. The wide use of these systems depends on their ability to adapt to changing environmental conditions and to deal with new objects. This requires learning capabilities on the parts of these systems. The exceptional attraction of learning in pattern recognition lies in the specific data themselves and the different stages at which they get processed in a pattern recognition system. This results a specific branch within the field of machine learning. At the workshop, were presented machine learning approaches for image pre-processing, image segmentation, recognition and interpretation.
Machine learning systems were shown on applications such as document analysis and medical image analysis.
Many databases are developed that contain multimedia sources such as images, measurement protocols, and text documents. Such systems should be able to retrieve these sources by content. That requires specific retrieval and indexing strategies for images and signals. Higher quality database contents can be achieved if it were possible to mine these databases for their underlying information. Such mining techniques have to consider the specific characteristic of the image sources. The field of mining multimedia databases is just starting out. We hope that our workshop can attract many other researchers to this subject.
The workshop is the first workshop of machine learning and data mining in pattern recognition. It was organized by the Leipzig Institute of Computer Vision and Applied Computer Sciences. The aim of the workshop was to bring together researchers from all over the world dealing with machine learning for image processing, image interpretation and computer vision in order to discuss the current state of research and to direct further developments in machine learning for image-related topics. We would like to start a series of MLDM workshops dealing with this specific topic.
It is a pleasure for us to thank the invited speakers for accepting our invitation to give lectures and contribute papers to the proceedings. We would also like to express our appreciation to the reviewers for their precise and highly professional work.
We are grateful to the German Science Foundation for their support of the Eastern European researchers.
We appreciate the help and understanding of the editorial staff at Springer-Verlag, and in particular Alfred Hofmann, who supported the publication of these proceedings in the LNAI series.

Last but not least, we wish to thank all speakers and participants for their interest in the workshop.

September 1999 Petra Perner and Maria Petrou

Workshop Chairs

Petra Perner	Leipzig Institute of Computer Vision and Applied Computer Sciences (IBaI), Germany
Maria Petrou	University of Surrey, UK

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