Preface

We are proud to present the proceedings of DAGM 2003, and we want to express our appreciation to the many people whose efforts made this conference such a success. We received about 140 papers from around the world, but we could only accept about half of these submissions for oral and poster presentations so as not to overload the agenda. Each paper was assigned three reviewers who followed a careful anonymous selection procedure. The quality of the research paper and its suitability for presentation were the main criteria in this very difficult selection process. Our 32 reviewers had a tough job evaluating these papers and, of course, the job was even tougher whenever contributions were rejected. We thank the reviewers for their time and effort. The program committee awarded prizes for the best papers, and we want to sincerely thank the donors. The following three invited papers were among the highlights:

- *Anil K. Jain* (*Michigan State University, USA*): Who's Who? Challenges in Biometric Authentication
- *Michael Unser* (*EPFL Lausanne, Switzerland*): Splines and Wavelets: New Perspectives and Opportunities for Pattern Recognition
- *Bernd Jähne* (*Heidelberg University, Germany*): Image Sequence Analysis in Environmental and Life Sciences

We are also very grateful and proud that several well-known experts enhanced our conference by offering tutorial sessions to our participants:

- *Christian Perwass, Gerald Sommer* (*Christian-Albrechts-University, Kiel, Germany*): (Clifford) Algebra – Introduction and Applications
- *Hans-Heinrich Bothe* (*Technical University of Denmark, Oersted-DTU*): Adaptive Paradigms for Pattern Recognition
- *Peter Kauff, Oliver Schreer* (*Frauenhofer Institut für Nachrichtentechnik, Heinrich-Hertz-Institute, Berlin, Germany*): Concepts, Systems and Algorithms for Immersive Video Communication
- *Michael Felsberg* (*Linköping University, Sweden*): Systematic Approaches to Image Processing and Computer Vision

Numerous corporations and organizations also deserve our thanks for sponsoring DAGM 2003 with financial support and material contributions: ABW GmbH, DaimlerChrysler AG, Fraunhofer-Inst. für Fabrikbetrieb und -automatisierung, Magdeburg, INB Vision AG, MEGWARE Computer GmbH, Otto-von-Guericke Univ. Magdeburg, Siemens AG, STEMMER IMAGING GmbH, SYMACON Engineering GmbH, and Volkswagen AG. And, last but not least, I want to thank my colleague Klaus Toennies, my co-editor Gerald Krell, and the members of the local organizational team, in particular Werner Liebscher and Regina Pohle, who all really made the DAGM 2003 symposium possible. Everyone did their very best to make the conference a success, and we sincerely hope that all participants profited from the presentations and enjoyed their stay in Magdeburg.

June 2003 Bernd Michaelis

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DAGM e.V.: German Association for Pattern Recognition

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Since 1978 DAGM (German Association for Pattern Recognition) has organized annual scientific conferences at various venues. The goal of each DAGM symposium is to inspire conceptual thinking, support the dissemination of ideas and research results from different areas in the field of pattern recognition, stimulate discussions and the exchange of ideas among experts, and support and motivate the next generation of young researchers.

DAGM e.V. was founded as a registered research association in September 1999. Until that time, DAGM had been comprised of the following support organizations that have since become honorary members of DAGM e.V.:

DGaO	Deutsche Arbeitsgemeinschaft für angewandte Optik (German Society for Applied Optics)
GMDS	Deutsche Gesellschaft für Medizinische Informatik, Biometrie und Epidemiologie (German Society for Medical Informatics, Biometry, and Epidemiology)
GI	Gesellschaft für Informatik (German Informatics Society)
ITG	Informationstechnische Gesellschaft (Information Technology Society)
DGN	Deutsche Gesellschaft für Nuklearmedizin (German Society for Nuclear Medicine)
IEEE	Deutsche Sektion des IEEE (Institute of Electrical and Electronics Engineers, German Section)
DGPF	Deutsche Gesellschaft für Photogrammetrie und Fernerkundung (German Society for Photogrammetry, Remote Sensing and Geo-Information)
VDMA	Fachabteilung industrielle Bildverarbeitung/Machine Vision im VDMA (Robotics + Automation Division within VDMA)
GNNS	German Chapter of the European Neural Network Society
DGR	Deutsche Gesellschaft für Robotik (German Robotics Society)

DAGM Prizes 2002

The main prize was awarded to

Daniel Cremers and Christoph Schnörr
Univ. Mannheim, Germany
Motion Competition: Variational Integration of Motion Segmentation and Shape
Regularization

Further DAGM prizes for the year 2002 were awarded to

Bernd Fischer and Joachim M. Buhmann
Univ. Bonn, Germany
Resampling Method for Path Based Clustering

Bodo Rosenhahn and Gerald Sommer
Univ. Kiel, Germany
Adaptive Pose Estimation for Different Corresponding Entities
(sponsored by ABW GmbH)

Andrés Bruhn, Joachim Weickert, and Christoph Schnoerr
Saarland Univ., Germany
Combining the Advantages of Local and Global Optic Flow Methods