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Edwin R. Hancock   Marcello Pelillo (Eds.)

# Energy Minimization Methods in Computer Vision and Pattern Recognition

Second International Workshop, EMMCVPR'99  
York, UK, July 26-29, 1999  
Proceedings



Springer

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## Volume Editors

Edwin R. Hancock  
University of York, Department of Computer Science  
York YO1 5DD, UK  
E-Mail: erh@cs.york.ac.uk

Marcello Pelillo  
Università Ca' Foscari di Venezia, Dipartimento di Informatica  
Via Torino 155, I-30172 Venezia Mestre, Italy  
E-Mail: pelillo@dsi.unive.it

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## Preface

Collected in this volume are the papers presented at the 2nd International Workshop on Energy Minimization Methods in Computer Vision and Pattern Recognition (EMMCVPR'99), held at the University of York, England, from July 26 through July 29, 1999. The workshop is the second in what we hope will become a series. The first meeting was held in Venice in May 1997. The motivation in starting this series of meetings was the feeling that energy minimization methods, a topic which has roots in various disciplines such as physics, statistics, and biomathematics, represent a fundamental methodology in computer vision and pattern recognition. Although the subject is traditionally well represented in major international conferences in the fields of computer vision, pattern recognition, and neural networks, our primary motivation in organizing this workshop series was to offer researchers the chance to report their work in a focussed forum that allows for intensive informal discussion.

We received 35 submissions for this workshop. Each paper was reviewed by three committee members who were asked to comment on the technical quality of the submissions and provide suggestions for possible improvement. Based on the comments of the reviewers as well as on time and space constraints we selected five papers to be delivered as long oral presentations and 17 papers for regular oral presentation. We make no distinction between these two types of papers in this book. The book is organized into seven sections on shape, minimum description length, Markov random fields, contours, search and consistent labeling, tracking and video, and biomedical applications. We believe that this topical coverage represents a good snapshot of the state of the art in the subject.

Finally, we must offer thanks to those who have helped us in bringing reality to the idea of holding this workshop. Firstly, we thank the program committee for reviewing the papers and providing insightful comments to their authors. We also gratefully acknowledge the work of the following people who helped in the review process: J. Clark, H. Deng, N. Duta, F. Ferrie, G. Guo, E. Mémin, P. Pérez, and L. Wang. Although the workshop was intended to be small we hope that this book will reach a larger audience. In this respect we are extremely grateful to Alfred Hofmann at Springer-Verlag who responded positively to our proposal to publish this volume in the Lecture Notes in Computer Science series. At York most of the hard work of assembling the reviews has been very professionally executed by Sara-Jayne Farmer. We also warmly acknowledge the help of Massimo Bartoli in assembling the final proceedings volume.

May 1999

Edwin Hancock  
Marcello Pelillo

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