Preface

This volume consists of the 42 papers presented at the International Workshop on Energy Minimization Methods in Computer Vision and Pattern Recognition (EMMCVPR 2001), which was held at INRIA (*Institut National de Recherche en Informatique et en Automatique*) in Sophia Antipolis, France, from September 3 through September 5, 2001. This workshop is the third of a series, which was started with EMMCVPR'97, held in Venice in May 1997, and continued with EMMCVR'99, which took place in York, in July 1999.

Minimization problems and optimization methods permeate computer vision (CV), pattern recognition (PR), and many other fields of machine intelligence. The aim of the EMMCVPR workshops is to bring together people with research interests in this interdisciplinary topic. Although the subject is traditionally well represented at major international conferences on CV and PR, the EMMCVPR workshops provide a forum where researchers can report their recent work and engage in more informal discussions.

We received 70 submissions from 23 countries, which were reviewed by the members of the program committee. Based on the reviews, 24 papers were accepted for oral presentation and 18 for poster presentation. In this volume, no distinction is made between papers that were presented orally or as posters. The book is organized into five sections, whose topics coincide with the five sessions of the workshop: "Probabilistic Models and Estimation", "Image Modelling and Synthesis", "Clustering, Grouping, and Segmentation", "Optimization and Graphs", and "Shapes, Curves, Surfaces, and Templates".

In addition to the contributed presentations, EMMCVPR 2001 had the privilege of including keynote talks by three distinguished scientists in the field: Donald Geman, Geoffrey Hinton, and David Mumford. These invited speakers have played seminal roles in the development of modern computer vision and pattern recognition, and continue to be involved in cutting-edge research.

We would like to thank a number of people who have helped us in making EMMCVPR 2001 a successful workshop. We thank Marcello Pelillo and Edwin Hancock for allowing us to take care of the EMMCVPR series, which they started, and for the important advice that made our organizational tasks easier. We also want to acknowledge all the program committee members for carefully reviewing papers for EMMCVPR.

Finally, we thank the various organizations that have provided support for EMMCVPR: the International Association for Pattern Recognition, who sponsored the workshop and provided publicity, the INRIA Sophia Antipolis, who hosted the workshop and provided financial support.

June 2001   Mário Figueiredo, Josiane Zerubia, and Anil K. Jain

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