Preface

The scale-space conference series dates back to the NSF/ESPRIT transatlantic collaboration on "geometry-driven diffusion" (1993–1996). This collaboration led to a series of very successful workshops followed by a PhD summer school on Gaussian Scale-Space Theory in Copenhagen, in the spring of 1996. The following year, the First International Conference on Scale-Space Theory in Computer Vision (Utrecht, July, 1997) was held. The series of international conferences has now grown to three. As was the case for the Second International Conference (Corfu, September 1999), the 2001 conference was affiliated with the ICCV as one of its several workshops. Entitled the "Workshop on Scale-Space and Morphology", the purpose of the conference was to encourage the exchange of information and to foster interactions among researchers in scale-space theory in computer vision and mathematical morphology. With the publication of these proceedings, we feel that our purposes have been accomplished.

The conference was held for the first time in North America, and succeeded in attracting participants from the western hemisphere and the pacific rim. A concerted effort was also made to make the workshop attractive to and affordable for graduate students. Of 60 high-quality submissions (including many papers in the subject areas that were accepted at ICCV or the overlapping Workshop on Variational and Level Set Methods), 18 papers were selected for oral presentations. They form Part I of this volume. Part 2 of the volume consists of 23 papers accepted for poster presentations. Invited talks were given by Professor Jitendra Malik, of the Computer Vision Group at the University of California at Berkeley, and by Professor Amiram Grinvald, of the Weizmann Institute of Science in Rehovot, Israel.

On behalf of the Program Board, I would like to thank the authors for their excellent presentations and written work; the referees for their time and valuable comments (each paper was reviewed by 3 referees); and the members of the General Board for their guidance in putting the conference together. We are grateful to the IEEE Computer Society (especially to Keith Price and Tom Fink for their assistance), to the ICCV Workshops Chair Jim Clark, and to Jim Little and David Lowe, the local organizers for ICCV in Vancouver. On a personal note I would like to thank the members of the Program Board, who kept me on course and encouraged me toward the finish line in preparing this volume, and to thank Libbie Geiger at the University of Richmond for her secretarial assistance. Finally, the conference participants deserve recognition for making the event both enjoyable and worthwhile.

May 2001   Michael Kerckhove

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Invited Adresses

Jitendra Malik (Computer Vision Group, University of California at Berkeley)
"Ecological Statistics of Grouping Cues in Natural Images"

Amiram Grinvald (Weizmann Institute of Science in Rehovot, Israel)
"Real Time Visualization of Cortical Dynamics; Linking Single Neurons to Neuronal Assemblies."

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