

Proceedings

IEEE Computer Society Conference on

Computer Vision and Pattern Recognition



June 23-25, 1999
Fort Collins, Colorado

Volume 1

Sponsored by the
IEEE Computer Society Technical Committee on
Pattern Analysis and Machine Intelligence

IEEE
COMPUTER
SOCIETY



Proceedings

**1999 IEEE COMPUTER SOCIETY
CONFERENCE ON
COMPUTER VISION AND
PATTERN RECOGNITION
VOLUME ONE**



Proceedings

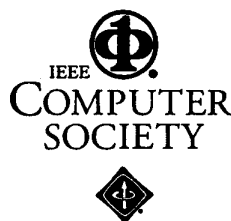
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Pattern Analysis and Machine Intelligence



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IEEE Catalog Number 99CB36354
ISBN: 0-7695-0149-4 (Softbound)
ISBN: 0-7803-5771-X (Casebound)
ISBN: 0-7695-0151-6 (Microfiche)
ISSN: 1063-6919
PR0149

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Editorial production by Thomas Baldwin and Regina Spencer Sipple

Cover art design by Joseph Daigle/Studio Productions

Printed in the United States of America by The Printing House

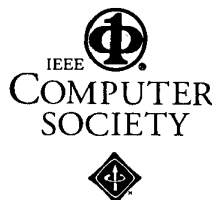


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Foreword

This proceedings contains the papers presented at the Eighteenth IEEE Conference on Computer Vision and Pattern Recognition (CVPR'99), held on June 23-25, 1999, in Fort Collins, Colorado, on the campus of Colorado State University.

This year, 503 papers were submitted. The Program Committee accepted 73 papers for oral presentation and 119 papers to be presented as posters with short talks given by the authors. No distinction in terms of quality is made between papers presented as oral presentations and papers presented as poster presentations.

Reviewing for CVPR'99 was handled by a large Program Committee plus additional reviewers selected by the Program Committee. In order to ensure broad representation of the field, the Program Committee was formed in two steps. First, 22 highly regarded experts were selected by the Organizing Committee to serve as Area Chairs. Each Area Chair was charged with reviewing one of the 22 research sub-areas specified in the Call for Papers. These Area Chairs then nominated roughly seven authorities in their area to serve on the Program Committee. After merging nominations, 107 individuals covering all 22 areas were appointed to the Program Committee. Once nominated to the Program Committee, these members served as reviewers in the area to which they were nominated as well as related areas. Area Chairs, and Program Committee members in consultation with Area Chairs, also designated additional reviewers. In this way, an additional 84 reviewers assisted with this year's conference.

Reviewing for CVPR'99 was "double-blind": only the General and Program Chairs knew the identity of the authors, and the Area Chairs knew the identity of the reviewers only for papers in their area. Each paper submitted was reviewed by at least three reviewers. To give some feel for the amount of work this entails, 191 Program Committee members and Additional Reviewers produced over 1,500 distinct reviews. We wish to thank all of those without whose efforts this conference could never have been. Their names are listed on the pages following this foreword.

The final decision on which papers to accept was made at the Area Chair Meeting held in Denver, Colorado, on February 20th and 21st. At this meeting, small groups of Area Chairs double-checked the reviews of every paper, after which every paper was given a hearing before the entire group. To the great credit of the Area Chairs, all but one of the 22 Area Chairs was able to attend this meeting.

As we hope the explanation of the reviewing process makes clear, every effort was made to maximize the fairness of the reviewing process, from the selection of the Program Committee through the final selection of papers. That said, all of those who are familiar with these processes recognize it is an imperfect world. Certainly, there may have been papers whose contributions were not appreciated, and to the authors of such papers we extend our apologies.

CVPR'99 would not have been possible without the dedication and hard work of many people. We wish to thank Charles Dyer for organizing the workshops, Kiriakos Kutulakos for organizing the tutorials, Patrick Flynn for overseeing the production of the CD-ROM, and William Hoff for organizing the demonstrations. We wish to thank Steven Shafer for overseeing the selection of papers to receive awards. At the IEEE, we wish to thank Thomas Baldwin, Dan Gibson, Tonya Horsley, Maggie Johnson, Anne Marie Kelly, Mary-Kate Rada, and Regina Sipple. We wish to thank Henrietta Cullinane at Colorado State University Conference Services for assisting with on-campus arrangements. Finally, we wish to thank Kathy Gebhart at Colorado State University for shepherding the one thousand and one details, both large and small, that go into the organization of a successful conference.

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Session 1-A

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