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Medical Data Analysis

Second International Symposium, ISMDA 2001 Madrid, Spain, October 8-9, 2001 Proceedings



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Preface

The 2nd International Symposium on Medical Data Analysis (ISMDA 2001) was the continuation of the successful ISMDA 2000, a conference held in Frankfurt, Germany, in September 2000. The ISMDA conferences were conceived to integrate interdisciplinary research from scientific fields such as statistics, signal processing, medical informatics, data mining, and biometrics for biomedical data analysis. A number of academic and professional people from those fields, including computer scientists, statisticians, physicians, engineers, and others, realized that new approaches were needed to apply successfully all the traditional techniques, methods, and tools of data analysis to medicine.

ISMDA 2001, as its predecessor, aimed to provide an international forum for sharing and exchanging original research ideas and practical development experiences. This year we broadened the scope of the conference, to included methods for image analysis and bioinformatics. Both are exciting scientific research fields and it was clear to the scientific committee that they had to be included in the areas of interest.

Medicine has been one of the most difficult application areas for computing. The number and importance of the different issues involved suggests why many data analysis researchers find the medical domain such a challenging field. New interactive approaches are needed to solve these problems.

In ISMDA 2001 we tried to enhance this interdisciplinary approach. Scientists from many areas submitted their papers. After a thorough peer-review process, 46 papers were selected for inclusion in the final program. We evaluated the 72 submitted papers according to their scientific originality, clear methodology, relevance, and results. All the papers were reviewed by at least two reviewers from the scientific committee and by additional reviewers. In addition, the volume contains three keynote lectures written by relevant invited speakers in areas of special interest. We did not include posters or "short papers" in the conference program. Thus, it was our aim that all the approved papers selected by the reviewers had a significant scientific content for their inclusion within the symposium proceedings.

We would like to thank all the people, institutions, and sponsors that have contributed to this symposium. Authors, members of the conference committees, additional reviewers, keynote speakers, and organizers collaborated in all aspects of the conference. Finally, we are specially grateful to SEIS, the Spanish Health Informatics Society, and its Executive Board, whose members have enthusiastically supported the conference from the very beginning.

October 2001

Jose Crespo Victor Maojo Fernando Martin

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