# **Lecture Notes in Electrical Engineering**

## Volume 633

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# Medical Imaging and Computer-Aided Diagnosis

Proceeding of 2020 International Conference on Medical Imaging and Computer-Aided Diagnosis (MICAD 2020)



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ISSN 1876-1100 ISSN 1876-1119 (electronic) Lecture Notes in Electrical Engineering ISBN 978-981-15-5198-7 ISBN 978-981-15-5199-4 (eBook) https://doi.org/10.1007/978-981-15-5199-4

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## **Preface**

Welcome to the proceedings of the International Conference on Medical Imaging and Computer-Aided Diagnosis (MICAD 2020) which was held in Oxford, UK, from January 20–21, 2020. MICAD is an annual conference which aims to provide a communication platform for top scholars, engineers, scientists, as well as graduate students to share ideas and discuss the latest technology in medical imaging and computer-aided diagnosis or related fields such as artificial intelligence and machine learning, to encourage growth, raising the profile of this multidisciplinary field with an ever increasing real-world applicability.

The diverse range of topics reflects the growth in the development and application of medical imaging and computer-aided diagnosis. The main topics covered in the proceedings are (i) optical imaging, (ii) image segmentation, (iii) biostatistics, (iv) applications of machine learning in imaging, (v) enhancement and reconstruction, (vi) diagnosis, classification, and treatment, and (vii) ophthalmology.

MICAD 2020 received submissions from 12 countries, in total, 56 full papers and 11 abstracts (the latter not considered for inclusion in this volume), and each paper was reviewed by at least three reviewers in a standard peer-review process. Based on the recommendation by three independent referees, finally 24 papers were accepted for MICAD 2020 (acceptance rate of 45%).

Many people have collaborated and worked hard to produce a successful MICAD 2020 conference. First, we would like to thank all the authors for submitting their papers to the conference, for their presentations and discussions during the conference. Our thanks go to the program committee members and reviewers, who carried out the most difficult work by carefully evaluating the submitted papers. Our special thanks to Yu-Dong Zhang, University of Leicester, UK, Manuchehr Soleimani, University of Bath, UK, Richard Jiang, Lancaster University, UK, and Edwin Abdurakman, City, University of London, UK, for the exciting keynote talks. We express our sincere thanks to the organizing committee chairs for helping us to formulate a rich technical program. We hope you enjoy the proceedings of MICAD 2020.

Ruidan Su

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