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KC Santosh · Ravindra Hegadi · Umapada Pal (Eds.)

Recent Trends in Image Processing and Pattern Recognition

4th International Conference, RTIP2R 2021 Msida, Malta, December 8–10, 2021 Revised Selected Papers



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Preface

It is our great pleasure to introduce this collection of research papers in Springer's Communication in Computer and Information Science (CCIS) series from the fourth International Conference on Recent Trends in Image Processing and Pattern Recognition (RTIP2R 2021). Initially we aimed to hold RTIP2R 2021 in-person at the University of Malta, Malta, during December 8–10, 2021, in collaboration with the 2AI: Applied Artificial Intelligence Research Lab, University of South Dakota (USA), and the Central University of Karnataka (India). Due to the unprecedented impact of COVID-19 and related travel restrictions, the RTIP2R 2021 team decided to hold the event virtually, making it possible for authors, scholars, and academicians to present their research studies online, with an average audience size of 40–50 per day.

As announced in the call for papers, RTIP2R 2021 attracted current and/or recent research on image processing, pattern recognition, and computer vision with several different applications, such as document understanding, biometrics, medical imaging, and image analysis in agriculture. Altogether, we received 84 submissions and selected 36 papers for conference presentations. For publication, unlike in the past, the conference chairs decided not include no-show papers as well as those papers that were not revised in accordance with the chairs' reports. Taking this into account, the conference chairs decided to move forward with 33 papers for publication. As a result, the acceptance rate for this volume is 39.29%. On average, each paper selected for conference presentation received at least three reviews with the exception of the few submissions that had desk rejections.

In brief, the event was a great platform bringing together research scientists, academics, and industry practitioners. We categorized the papers into five different tracks: a) Healthcare: medical imaging and informatics; b) Computer vision and pattern recognition; c) Document analysis and recognition; d) Signal processing and machine learning; and e) Satellite imaging and remote sensing.

The conference was full of innovative ideas, and we are grateful to the following keynote speakers for their insightful talks: Sally McClean (Ulster University, UK), Ajith Abraham (Machine Intelligence Research Labs, USA), Neeraj Kumar (Thapar Institute of Engineering & Technology, India), and Girijesh Prasad (Ulster University, UK). We would like to thank everyone who contributed to the success of RTIP2R 2021.

January 2022

KC Santosh Ravindra Hegadi Umapada Pal

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