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K. A. Radhakrishna Rao *Editors*

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Emerging Research in Electronics, Computer Science and Technology

Proceedings of International Conference,
ICERECT 2018

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Preface

This conference proceedings volume contains the written versions of most of the contributions presented during the Third International Conference on Emerging Research in Electronics, Computer science and Technology—ICERECT 18, held during 23 and 24 August 2018, at PES College of Engineering (PESCE), Mandya, Karnataka, India. The conference was held in association with Binghamton University, State University of New York, USA. The vast experience of PESCE in organizing international conference has come to use in bringing out this proceedings. PESCE is a pioneering technical school decimating engineering knowledge for 56 years. The accreditation from NBA and NAAC is testimonials to its credit. Being the beneficiary of World Bank's Technical Quality Improvement Programme (TEQIP) component 1.3, this conference and publication of this proceedings are funded by TEQIP-III.

The motivation for this international conference is due to the fact that the present trends in computers and communications have received attention recently and noticeable progress towards useful applications to mankind is reported. The conference aims to provide an excellent international forum for sharing knowledge and results in theory, methodology and applications in electronics, electrical and computer science. The theme of the conference has been kept generic intentionally with an aim to provide a wide exposure to delegates of this conference. This proceedings while it is exhaustive meets the quality specifications. Articles from wide areas of electronics, communication, computer science and electrical engineering are included.

This proceedings has 121 research articles from different areas of research of both theoretical nature and application nature. We are very sure it will be of great use to budding researchers to kick start and to progress their research as well.

The research papers are organized into three main streams of electronics, electrical and computer technology for the ease of readers. The presentation sessions were also held in the same manner. The areas of electronics cover signal processing and its applications, wireless technology, solid-state devices, VLSI, radar and antennas. The field of computer technology has a focus on algorithms for image and video processing, parallel algorithms, IoT, data mining, machine learning, cloud

computing and big data analytics. The papers in the electrical engineering category cover power systems, power converts, drives, machines and control.

The experience of three ICERECT has been very pleasant and made us look forward to the fourth ICERECT. PESCE has the potential and willingness to conduct many other international conferences, and researchers can look forward to many in the days ahead.

Mandya, India

Dr. V. Sridhar
Dr. K. A. Radhakrishna Rao
Dr. M. C. Padma

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We would like to thank NPIU, TEQIP, Department of Technical Education and Government of Karnataka for extending their financial support to this conference. We would also like to thank TEQIP mentor and coordinator of our institute. We also express our thanks to the editorial board of Springer LNEE. Our thanks are due to President and Trustees of PET® for their constant support and encouragement in organizing this conference successfully.

We thank all our patrons and especially Dr. V. Sridhar profusely for his encouragement to research activities in our institute.

Thanks are also due to the conference committee chair, Dr. H. V. Ravindra, and other committee members, heads of various departments, specifically the organizing departments, CSE, ECE, EE and ISE, the reviewers of the research papers, chairpersons and coordinators of various sessions, staff and student volunteers who made this conference a grand success.

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