

Advances in Intelligent Systems and Computing

Volume 713

Series editor

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The series “Advances in Intelligent Systems and Computing” contains publications on theory, applications, and design methods of Intelligent Systems and Intelligent Computing. Virtually all disciplines such as engineering, natural sciences, computer and information science, ICT, economics, business, e-commerce, environment, healthcare, life science are covered. The list of topics spans all the areas of modern intelligent systems and computing such as: computational intelligence, soft computing including neural networks, fuzzy systems, evolutionary computing and the fusion of these paradigms, social intelligence, ambient intelligence, computational neuroscience, artificial life, virtual worlds and society, cognitive science and systems, Perception and Vision, DNA and immune based systems, self-organizing and adaptive systems, e-Learning and teaching, human-centered and human-centric computing, recommender systems, intelligent control, robotics and mechatronics including human-machine teaming, knowledge-based paradigms, learning paradigms, machine ethics, intelligent data analysis, knowledge management, intelligent agents, intelligent decision making and support, intelligent network security, trust management, interactive entertainment, Web intelligence and multimedia.

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Progress in Advanced Computing and Intelligent Engineering

Proceedings of ICACIE 2017, Volume 1

 Springer

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Preface

This volume contains the papers presented at 2nd International Conference on Advanced Computing and Intelligent Engineering (ICACIE) 2017: The 2nd International Conference on Advanced Computing and Intelligent Engineering (www.icacie.com) held during 23–25 November 2017 at the Central University of Rajasthan, India. There were 618 submissions and each qualified submission was reviewed by a minimum of two Technical Program Committee members using the criteria of relevance, originality, technical quality, and presentation. The committee accepted 109 full papers for oral presentation at the conference and the overall acceptance rate is 18%.

ICACIE 2017 was an initiative taken by the organizers which focuses on research and applications on topics of advanced computing and intelligent engineering. The focus was also to present state-of-the-art scientific results, to disseminate modern technologies, and to promote collaborative research in the field of advanced computing and intelligent engineering.

Researchers presented their work in the conference and had an excellent opportunity to interact with eminent professors, scientists and scholars in their area of research. All participants were benefitted from discussions that facilitated the emergence of innovative ideas and approaches. Many distinguished professors, well-known scholars, industry leaders, and young researchers were participated in making ICACIE 2017 an immense success.

We had also industry and academia panel discussion and we invited people from software industries like TCS, Infosys, and DRDO.

We thank all the Technical Program Committee members and all reviewers/sub-reviewers for their timely and thorough participation during the review process.

We express our sincere gratitude to Honourable Vice Chancellor and General Chair, Prof. Arun K. Pujari, Central University of Rajasthan to allow us to organize ICACIE 2017 on the campus and for his valuable moral and timely support. We also thank Prof. A. K. Gupta, Dean Research for his valuable guidance. We appreciate the time and efforts put in by the members of the local organizing team at Central University of Rajasthan, especially the faculty members of different departments, student volunteers, administrative, account section, guest house

management and hostel management staff, who dedicated their time and efforts to make ICACIE 2017 successful. We thank Mr. Subhashis Das Mohapatra, System Analyst, C.V. Raman College of Engineering, Bhubaneswar for designing and maintaining ICACIE 2017 Website.

We are very grateful to all our sponsors, especially DRDO for its generous support towards ICACIE 2017.

Bhubaneswar, India
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Kharagpur, India
Jaipur, India
Rourkela, India

Bibudhendu Pati
Chhabi Rani Panigrahi
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About This Book

The book focuses on theory, practice and applications in the broad areas of advanced computing techniques and intelligent engineering. This two volumes book includes 109 scholarly articles, which have been accepted for presentation from over 618 submissions in the 2nd International Conference on Advanced Computing and Intelligent Engineering held at Central University of Rajasthan, India during 23–25 November, 2017. The first volume of this book consists of 55 numbers of papers and volume 2 contains 54 papers with a total of 109 papers. This book brings together academic scientists, professors, research scholars and students to share and disseminate their knowledge and scientific research works related to advanced computing and intelligent engineering. It helps to provide a platform to the young researchers to find the practical challenges encountered in these areas of research and the solutions adopted. The book helps to disseminate the knowledge about some innovative and active research directions in the field of advanced computing techniques and intelligent engineering, along with some current issues and applications of related topics.

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