Preface

The ICCCCS is a major multidisciplinary conference organized with the objective of bringing together researchers, developers and practitioners from academia and industry working in all areas of computer and computational sciences. It is organized specifically to help computer industry to derive the advances of next generation computer and communication technology. Researchers are invited to present the latest developments and technical solutions.

Technological developments all over the world are dependent upon globalization of various research activities. Exchange of information and innovative ideas are necessary to accelerate the development of technology. Keeping this ideology in preference, Aryabhatta College of Engineering & Research Center, Ajmer, India, has come up with an event—International Conference on Computer, Communication and Computational Sciences (ICCCCS-2016) during August 12–13, 2016.

Ajmer, situated in the heart of India, just over 130 km southwest of Jaipur, is a burgeoning town on the shore of the Ana Sagar Lake, flanked by barren hills. Ajmer has historical strategic importance and was ransacked by Mohammed Gauri on one of his periodic forays from Afghanistan. Later, it became a favorite residence of the mighty Mughals. The city was handed over to the British in 1818, becoming one of the few places in Rajasthan controlled directly by the British rather than being part of a princely state. The British chose Ajmer as the site for Mayo College, a prestigious school opened in 1875 exclusively for the Indian Princes, but today open to all those who can afford the fees. Ajmer is a perfect place that can be symbolized for demonstration of Indian culture and ethics and display of perfect blend of a plethora of diverse religions, communities, cultures, linguistics, etc., all coexisting and flourishing in peace and harmony. This city is known for the famous Dargah Sharif, Pushkar Lake, Brahma Temple, and many more evidences of history.

This is for the first time Aryabhatta College of Engineering & Research Center, Ajmer, India, is organizing International Conference on Computer, Communication and Computational Sciences (ICCCCS 2016), with a foreseen objective of enhancing the research activities at a large scale. Technical Program Committee and
Advisory Board of ICCCCS include eminent academicians, researchers, and practitioners from abroad as well as from all over the nation.

In this volume, the selected manuscripts have been subdivided into various tracks named ‘Intelligent Hardware and Software Design’, ‘Advanced Communications’, ‘Power and Energy Optimization’, ‘Intelligent Image Processing’, Advanced Software Engineering’, ‘IoT’, ‘ADBMS & Security’, and ‘Evolutionary and Soft Computing’. A sincere effort has been made to make it an immense source of knowledge for all, including 140 manuscripts in this collection. The selected manuscripts have gone through a rigorous review process and are revised by authors after incorporating the suggestions of the reviewers.

ICCCCS 2016 received 429 submissions from around 729 authors of 12 different countries such as USA, Iceland, China, Saudi Arabia, South Africa, Taiwan, and Malaysia. Each submission has been checked with anti-plagiarism software. On the basis of plagiarism report, each submission was rigorously reviewed by at least two reviewers with an average of 2.45 per reviewer. Even some submissions have more than two reviews. On the basis of these reviews, 140 high-quality papers were selected for publication in this proceedings volume, with an acceptance rate of 32.6%.

We are thankful to the speakers, delegates, and authors for their participation and their interest in ICCCCS as a platform to share their ideas and innovation. We are also thankful to the Prof. Dr. Janusz Kacprzyk, Series Editor, AISC, Springer and Mr. Aninda Bose, Senior Editor, Hard Sciences, Springer for providing continuous guidance and support. Also, we extend our heartfelt gratitude to the reviewers and Technical Program Committee Members for their concern and efforts in the review process. We are indeed thankful to everyone directly or indirectly associated with the conference organizing team leading it towards success.

Although utmost care has been taken in compilation and editing, however, a few errors may still occur. We request the participants to bear with such errors and lapses (if any). We wish you all the best.

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