

Preface

The last decade has witnessed remarkable changes in IT industry, virtually in all domains. The 50th Annual Convention, CSI-2015, on the theme “Digital Life” was organized as a part of CSI-2015, by CSI at Delhi, the national capital of the country, during December 02–05, 2015. Its concept was formed with an objective to keep ICT community abreast of emerging paradigms in the areas of computing technologies and more importantly looking at its impact on the society.

Information and Communication Technology (ICT) comprises of three main components: infrastructure, services, and product. These components include the Internet, infrastructure-based/infrastructure-less wireless networks, mobile terminals, and other communication mediums. ICT is gaining popularity due to rapid growth in communication capabilities for real-time-based applications. New user requirements and services entail mechanisms for enabling systems to intelligently process speech- and language-based input from human users. CSI-2015 attracted over 1500 papers from researchers and practitioners from academia, industry and government agencies, from all over of the world, thereby making the job of the Programme Committee extremely difficult. After a series of tough review exercises by a team of over 700 experts, 565 papers were accepted for presentation in CSI-2015 during the 3 days of the convention under ten parallel tracks. The Programme Committee, in consultation with Springer, the world’s largest publisher of scientific documents, decided to publish the proceedings of the presented papers, after the convention, in ten topical volumes, under ASIC series of the Springer, as detailed hereunder:

1. Volume # 1: ICT Based Innovations
2. Volume # 2: Next Generation Networks
3. Volume # 3: Nature Inspired Computing
4. Volume # 4: Speech and Language Processing for Human-Machine Communications
5. Volume # 5: Sensors and Image Processing
6. Volume # 6: Big Data Analytics

7. Volume # 7: Systems and Architecture
8. Volume # 8: Cyber Security
9. Volume # 9: Software Engineering
10. Volume # 10: Silicon Photonics and High Performance Computing

We are pleased to present before you the proceedings of the Volume # 6 on “Big Data Analytics”. The title “Big Data Analytics” discusses the new models applied for Big Data Analytics. It traces the different business interests in the field of Big Data Analytics from the perspective of decision-makers. The title also evaluates the uses of data analytics in understanding the need of customer base in various organizations.

Big data is a new buzzword due to the generation of data from a diversity of sources. The volume, variety and velocity of data coming into an organization from both structured and unstructured data sources continue to reach unprecedented levels. This phenomenal growth implies that one must not only understand the big data in order to decipher the information that truly counts, but one must also understand the possibilities and opportunities of data analytics.

Big data analytics is the process of examining big data to uncover hidden patterns, unknown correlations and other useful information that can be used to make better decisions. With big data analytics, data scientists and others can analyse huge volumes of data that conventional analytics and business intelligence solutions cannot touch. The title “Big Data Analytics” analyses the different aspects of big data research and how the same is being applied across organizations to handle their data for decision-making and different types of analytics for different business strategies.

This volume is designed to bring together researchers and practitioners from academia and industry to focus on extending the understanding and establishing new collaborations in these areas. It is the outcome of the hard work of the editorial team, who have relentlessly worked with the authors and steered up the same to compile this volume. It will be a useful source of reference for the future researchers in this domain. Under the CSI-2015 umbrella, we received over 500 papers for this volume, out of which 74 papers are being published, after a rigorous review processes, carried out in multiple cycles.

On behalf of organizing team, it is a matter of great pleasure that CSI-2015 has received an overwhelming response from various professionals from across the country. The organizers of CSI-2015 are thankful to the members of *Advisory Committee, Programme Committee and Organizing Committee* for their all-round guidance, encouragement and continuous support. We express our sincere gratitude to the learned *Keynote Speakers* for support and help extended to make this event a grand success. Our sincere thanks are also due to our *Review Committee Members* and the *Editorial Board* for their untiring efforts in reviewing the manuscripts, giving suggestions and valuable inputs for shaping this volume. We hope that all the participants/delegates will be benefitted academically and wish them all the best for their future endeavours.

We also take the opportunity to thank the entire team from Springer, who have worked tirelessly and made the publication of the volume a reality. Last but not least, we thank the team from Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM), New Delhi, for their untiring support, without which the compilation of this huge volume would not have been possible.

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Indore, India
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V.B. Aggarwal
Vasudha Bhatnagar
Durgesh Kumar Mishra

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