EDITORIAL

Introduction to special issue on 'Recent Computing Paradigms, Network Protocols, and Applications'

Atulya K. Nagar[1] · Manmath N. Sahoo[2] · Sambit Bakshi[2] ·
Basabdatta Sen Bhattacharya[3]

This special issue of *Innovations in Systems and Software Engineering: A NASA Journal* is devoted to selected contributions from the 3rd International Conference on Advanced Computing, Networking and Informatics (ICACNI-2015), organized by School of Computer Engineering, KIIT University, Odisha, India, during 23–25 June, 2015. The conference commenced with a keynote by Prof. Nikhil R. Pal (Fellow IEEE, Vice President for Publications IEEE Computational Intelligence Society (2015–2016), Indian Statistical Institute, Kolkata, India) on 'A Fuzzy Rule-Based Approach to Single Frame Super Resolution'. Apart from three regular tracks on advanced computing, networking, and informatics, the conference hosted three invited special sessions. While a total of 558 articles across different tracks of the conference were received, 132 articles are finally selected for presentation and publication by Smart Innovation, Systems and Technologies series of Springer as Volume 43 and 44. The conference showcased a technical talk by Prof. Nabendu Chaki (Senior Member IEEE, Calcutta University, India) on 'Evolution from Web-based Applications to Cloud Services: A Case Study with Remote Healthcare'. The conference identified some wonderful works and has given away eight awards in different categories.

The conference was successful in bringing together academics, earlier career researchers and students as well as industrial practitioners to share and disseminate recent cutting edge research in these areas. We are pleased to note that the 4th ICACNI 2016 in this series of conferences is scheduled to be organized by Centre for Computer Vision and Pattern Recognition, National Institute of Technology Rourkela, Odisha, India, during 22–24 September 2016.

Out of 132 articles presented and published in the proceedings of the conference, some fine works were invited for submission after extension and these were peer-reviewed for inclusion in the Innovations in Systems and Software Engineering: A NASA Journal, Springer. In addition to the invited papers, an open call was also issued for this special issue as a result of which a total of 38 submissions were received for this special issue entitled 'Recent Computing Paradigms, Network Protocols, and Applications'. The final decision for the inclusion of seven papers, brief summary of these is given in the paragraph to follow, in this special issue has been strictly based on the outcome of the rigorous two stage peer-review process.

The first three articles entitled 'A Uniform Representation of Multi-Variant Data in Intensive-Query Databases', 'Recommendation System based on Product Purchase Analysis', and 'Measuring Semantic Similarity between Land-cover Classes for Spatial Analysis: An Ontology Hierarchy Exploration Approach?' put forward instances of advancements in computing paradigms.

Next two articles entitled 'Direction Prediction for Avoiding Occlusion in Visual Surveillance' and 'On the Use of Secret Sharing as a Secure Multi-use Pad' present some areas of machine-guided security systems.

The last two articles entitled 'Self-Organized Area Coverage in Wireless Sensor Networks by Limited Node Mobility' and 'Uniform Load Sharing on a Hierarchical Content

✉ Sambit Bakshi
  sambitbaksi@gmail.com

1 Department of Mathematics and Computer Science, Faculty of Science, Liverpool Hope University, Hope Park, Liverpool L16 9JD, UK

2 Department of Computer Science and Engineering, National Institute of Technology Rourkela, Rourkela 769 008, Odisha, India

3 School of Engineering, University of Lincoln, Brayford Pool, Lincoln LN6 7TS, UK

Delivery Network Interconnection Model' record the latest researches in the field of networking models and protocols.

The objective of this special issue has been to make available recent results and report in-progress research in the field and we much hope that this publication will become an important reference source to many students, researchers, and academics in their educational, research, and professional activities. We very much expect that readers will find the articles scholastically interesting and of relevance to recent states of research in respective domains. As guest editors, we would like to express our deep sense of gratitude to the Editor-in-Chief, Prof. Michael G. Hinchey, for providing us with the opportunity to host this special issue and for his continued support and valued suggestions to maintain high quality. We also thank the authors for their contributions, including those whose papers could not be included. Last but not least, we express our sincere gratitude for the thoughtful work of the reviewers who provided invaluable evaluations and recommendations that have helped maintain the quality and clarity of presentation of the papers.