AutoSoft Journal Special Issue Proposal
Big Data & Analytics Architecture

Introduction

Data is often considered the crown jewels of an organization. It can be used in myriad ways to run the business, market to customers, forecast sales, measure performance, gain competitive advantage, and discover new business opportunities. In addition, lately, a convergence of new technologies and market dynamics has opened a new frontier for information management and analysis. This new wave of computing involves data with far greater volume, velocity, and variety than ever before. Big Data is being used in ingenious ways to predict customer-buying habits, detect fraud and waste, analyze product sentiment, and react quickly to events and changes in business conditions. It is also a driving force behind new business opportunities.

Traditional data analysis technologies are based on the well-structured data from operational systems that conform to pre-determined relationships. Big Data, however, does not follow this structured model. The streams are all different and it is difficult to establish common relationships. However, with its diversity and abundance come opportunities to learn and to develop new ideas which can help researcher to learn some new knowledge. The architectural challenge is to bring the two paradigms together. So, rather than approach Big Data as a new technology silo, which enables to leverage all types of data, as situations demand, to promptly satisfy kinds of new needs.

Topics of interest for articles include, but are not limited to:

- Big data analysis algorithms
- Scalable data storage and computation management for Big Data
- Resource scheduling, SLA, Fault tolerance and reliability for Big Data
- Multiple source streaming data processing and integration
- Virtualization and visualization of Big Data
- Novel programming models and platforms such as MapReduce or Spark for Big Data
- Security and privacy in Big Data processing
- Green, energy-efficient models and sustainability issues for Big Data
- Innovative Cloud infrastructure for Big Data
- Wireless and mobility support in for Big Data
- Scalable software platforms for fast Big Data analytics on heterogeneous and hybrid architectures
- Big Data applications on heterogeneous architectures such as healthcare, surveillance and sensing, e-commerce, etc.

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Short bio of guest editors:

Arun Kumar Sangaiah has received his Master of Engineering (ME) degree in Computer Science and Engineering from the Government College of Engineering, Tirunelveli, Anna University, India. He had received his Doctor of Philosophy (PhD) degree in Computer Science and Engineering from the VIT University, Vellore, India. He is presently working as an Associate Professor in School of Computer Science and Engineering, VIT University, India. His area of interest includes software engineering, computational intelligence, wireless networks, bio-informatics, and embedded systems. He has authored more than 100 publications in different journals and conference of national and international repute. His current research work includes global software development, wireless ad hoc and sensor networks, machine learning, cognitive networks and advances in mobile computing and communications. Moreover, he has carried out number of funded research projects for Indian government agencies. Also, he was registered a one Indian patent in the area of Computational Intelligence. Besides, Prof. Sangaiah is responsible for Editorial Board Member/Associate Editor of various international journals.

Dr. Walter Miller was an Associate Researcher with University of Alberta. He is the guest editor of ACM/Springer Mobile Networks and Applications (IF: 1.538), Multimedia Tools and Applications (IF: 1.335), Journal of Intelligent & Fuzzy Systems (IF: 1.838), Computers & Electrical Engineering (IF: 1.084), International Journal of Networking and Virtual Organizations (IJNVO) and so on, he is also the reviewer of many journals such as IEEE Transactions on Big Data, IEEE Transactions on Industrial Informatics (4.708), Journal of Network and Computer Applications (IF: 2.331), The Journal of Supercomputing (IF: 0.858), Multimedia Tools and Applications (IF: 1.331) and some top conference such as SC’16, CCGrid’16, NPC’15 and NPC’16. His research interests include distributed data stream analysis, cloud computing and graph computing. He is a Member ACM and IEEE.

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Dr Ford involved with some project relate with Technology Alignment in some of multinational company like Astra, United Tractors, Telkom, Sony Erickson.

For International highlight, Dr Ford is the recipient of Visiting Professor in Kazan Federal University, Russia, Invited Scholar in Aligarh Muslim University, keynote speaker in ICCNT 2014 and Invited Scholar in ICTP Trieste Italy.

Dr. K. K. Mishra is presently working as Visiting Assistant Professor in Department of Mathematics and Computer Science, UMSL, MO, USA.K. K. Mishra has successfully organized around 6 IEEE conferences in India (ICCCT Series) either as a conference secretary or as a program chair. He has worked as PC members for many conferences in India and abroad and has successfully organized some special issues in highly index journals. He is a regular reviewer of Journal of Supercomputing (Springer), IEEE Transaction on Cybernetics, IEEE System Journal, Neural computing and application and IETE journals. In addition to it, he has reviewed many publications for SCI and Scopus indexed journal. Presently he is involved as program chair for following conference International Conference on Computer, Communication and Computational Sciences (ICCCCS- 2016) [URL: www.ic4s.in] & International Conference on Recent Advancement in Computer, Communication and Computational Sciences (ICRACCCS-2016) [URL: www.racccs.com]. Moreover, he is editing a special issue in journal of intelligent and fuzzy system, IOS press (SCI).

**Submission Instructions**

This special issue solicits original work not under consideration for publication in any other conference or journal. Authors need to prepare the manuscripts according to the rudiments of Intelligent Automation & Soft Computing journal (Autosoft Journal). Authors should submit their papers through the online manuscript portal system (http://wacong.org/autosoft/auto/index.php) and select the right special issue. For more information, please contact the Corresponding Guest Editor Dr. Walter Miller at millerwal920@gmail.com.
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