

Knowledge Management and Big Data Analytics

In Conjunction With
IEEE International Conference on Big Data 2013

Oct. 6-9, 2013, Santa Clara, CA, USA

Workshop website:

<http://wp.csiro.au/kmba2013/>

Download workshop CFP:

http://wp.csiro.au/kmba2013/files/2013/05/KMBA20131_CFP.pdf

Download Special Issue CFP:

http://wp.csiro.au/kmba2013/files/2013/05/Knowledge_Management_Big_Data_Workshop_Special_Issue.pdf.

Data driven scientific discovery approach has already been agreed to be an important emerging paradigm for computing in areas including social, service, Internet of Things (or sensor networks), and cloud. Under this paradigm, Big Data is the core that drives new researches in many areas, from environmental to social. There are many new scientific challenges when facing this big data phenomenon, ranging from capture, curation, storage, search, sharing, analysis, and visualization. The complication here is not just the storage, I/O, query, and performance, but also the integration across heterogeneous, interdependent complex data resources for real-time decision-making, collaboration, and ultimately value co-creation.

Due to the consideration of real-time performance, return on investment (ROI), complexity/practicability, and data-human interface, one important approach for predictive big data analytics is to focus on the creation and maintenance of domain specific knowledge that serves as the bridge between the high speed incoming raw data and the "last mile" self service analytics. This will significantly reduce the amount of data to be managed and processed. Its presentation view will likely be more user-centric, easily to be understood by non-IT experts for their final decision making; time taken for decision making can also be fast enough to meet most of the real-time analytics requirements. A good example is the use of click stream behavioral data of an online shopping website vs. the purchase power or loyalty of its visitors for advertisement and recommendation decisions.

Due to the four main properties (i.e. volume, velocity, variety, and veracity) of the big data, storing temporal knowledge from big data for real-time analytics poses many new challenges to its life cycle maintenance of knowledge in Big Data analytics. The First International Workshop on Knowledge Management and Big Data Analytics aims to foster a dialogue among researchers, industry practitioners, as well as potential users of Big Data, discuss new opportunities and investigations to promote the best actionable analytics framework for wide range of applications, from social to environmental. The submission of research, industrial, position, survey papers and on-going work are encouraged to fuel up the discussion. The workshop will be collocated with the IEEE Conference on BigData 2013.

Research Topics Interested in but not Limited to:

- Data and Knowledge Modeling
- Knowledge Mapping from Big Data Sources

- Knowledge Creation through Crowdsourcing
- Knowledge-inspired Big Data Indexing and Query Processing
- Dynamic Knowledge Integration and Visualization
- Data and Knowledge Interoperability and Exchange
- Data and Knowledge Provenance
- Knowledge-inspired Data Mining and Machine Learning
- Knowledge Discovery, Search, and Recommendation
- Knowledge Analytics Framework and Architecture
- Privacy Preserving Big Data Collection / Analytics
- Knowledge Quality Estimation and Uncertainty Handling
- Use Cases and Applications in Knowledge and Big Data analytics

Important Dates

- July 30, 2013: Due date for full workshop papers submission
- August 26, 2013: Notification of paper acceptance to authors
- September 10, 2013: Camera-ready of accepted papers
- October 6, 2013: Workshop

Submission Details

Authors are invited to submit original, unpublished papers that are not being considered for publication in any other forum. Each submission will be evaluated for acceptability by at least three members of the Program Committee. Decisions about acceptance will be based on relevance to the workshop theme, originality, potential significance, topicality and clarity. Since all accepted papers will be presented at the workshop, we require that at least one of the submitting authors must be a registered participant at the IEEE BigData 2013, and committed to attend the KMBA Workshop.

Submissions to the Workshop are accepted only in pdf format and should be submitted via the workshop submission site: [KMBA Submission](#). Papers must be formatted in the IEEE camera-ready format. Submissions must not exceed 8 pages, including figures. Submissions exceeding this limit will not be reviewed. Papers on late-breaking results or on visions and challenges should not exceed 2 pages.

LaTeX and Word formatting instructions and LaTeX macros are now available for download at [KMBA Submission](#).

Publication

All papers accepted to the KMBA Workshop will be presented during the workshop and included in the Workshop Proceeding published by the IEEE Computer Society Press, made available at the Conference.

The International Workshop on Knowledge Management and Big Data Analytics is organising a **Special Issue of Journal of Internet Technology** (SCI indexed, IF 0.508) that encourages submission of revised and extended versions of best/top rated papers from our workshop. The special issue also seeks direct submission of original papers that present novel ideas in KMBA. All papers will be peer-reviewed and selected

competitively based on their originality and merit as per requirement of the journal. All queries on this special issue should be directed to its guest editors. Details on this special issue can be found in the separate Call for Paper on the top of the document.

Program Co-Chairs

- Qing Liu, CSIRO, Australia
- Chi-Hung Chi, CSIRO, Australia
- Chen Ding, Ryerson University, Canada

Program Committee Members

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