

# Call for Papers on ICCMIT 2017

## Special Session on

### “Big data guided embedded digital ecosystems and technologies (EDEST) and knowledge management”

## Organized by

Dr Shastri L Nimmagadda, Dr Dengya Zhu and Dr Amit Rudra  
School of Information Systems  
Curtin Business School, Curtin University, Perth, Australia  
([shastri.nimmagadda@curtin.edu.au](mailto:shastri.nimmagadda@curtin.edu.au) and [d.zhu@curtin.edu.au](mailto:d.zhu@curtin.edu.au))

**Objectives and Motivation:** In many industries, largely the data sources are heterogeneous and multidimensional. They are characterized by multiple volumes and varieties. As an example, oil and gas upstream has big data volumes and varieties in multiple domains. By virtue of varying geographies and complex topographies, petroleum data sources in multiple domains have periodic and geographic dimensions. In addition, business rules in these industries change quickly because of fast changing resources & business scenarios. To demonstrate big data concepts in the resources & business, various petroleum systems are considered in the context of Middle Eastern regions. For sustainable business and diverse operations in the Middle Eastern regions, as a part of digital ecosystems and technologies (*DEST*) approach, design and development of petroleum management information system (*PMIS*) and digital petroleum ecosystems (*PDE*) are articulated, simulating a robust and holistic integrated framework. Big data tools and technologies that drive this framework offer modelling and integrated solutions with improved understanding of systems & connectivity. Other artefacts in the framework are data mining, visualization, data analysis and interpretation that add values to *PDE* and its associated projects. New knowledge is obtained on petroleum exploration & production (*E&P*) to make future forecast of resources in the hugely spread petroleum provinces in the Middle Eastern regions in a sustainable manner.

The objective of the special track is to explore the big data opportunities in an energy industry and management. The big data hype motivate us to develop a design science information system (*DSIS*), which is articulated by an integrated framework. This framework caters the data modelling, data warehousing and mining artefacts with volumes of data sources, associated with petroleum systems of large-scale sedimentary basins of Europe, Asia and Africa. The *PDE* approach is a *digital oil field* solution in various application development domains such as conventional and unconventional petroleum systems, carbon emission ecosystems and even turbulent resources management.

**Scope and Interests:** Topics of interest include, but are not limited to:

1. Big data and Embedded Ecosystems & data management
2. Green Energy Systems
3. Big-data analytics for Business Knowledge
4. Data and Information Modelling Methodologies
5. Data integration, Warehousing and Mining
6. Data Visualization and Interpretation of big-data focused
7. Knowledge mapping and adding values to green energy projects
8. Case studies of any of these topics

**Paper Submission Important Dates**

All instructions and templates for submission can be found in the ICCMIT 2017 web site: <http://www.iccmit.net/>. Please, contact the special session organizers if you are planning to submit any paper.

Paper Abstract Submission: February 15, 2017

Notification of Acceptance: February 28, 2017

Final Paper Submission and AuthorsøCamera Ready: March 7, 2017

Conference Dates: April 3-5, 2017