



I-ESA 2016

The International Conference on Interoperability for Enterprise Systems and Applications

Enterprise Interoperability in the digitized and networked Factory of the Future

GUIMARÃES, Portugal

Pre-Conference:

29th March 2016 (Doctoral Symposium)

29th - 30st March 2016 (Workshops)

Conference: 31st March -1st April 2016

CALL FOR PAPERS

Big Data Interoperability for Enterprises (BDI4E)

Workshop

29-30 March 2016, Guimarães, Portugal

In conjunction with I-ESA 2016

Recent technological advances have enabled low-cost computer-based solutions to remote sensing and controlling objects in the physical world. Especially remote sensing leads to a wealth of data, i.e., 'big data', which can be applied in many domains for many purposes. Big data is also of growing importance to enterprise organizations, since most enterprises are driven by data; they want to monitor business processes, products, services, markets, customers, competitors, partners etc., and make decisions accordingly. In order for these enterprises to stay competitive and innovative, cost-efficient use of data is a key requirement.

Big data on real-time events complements data from traditional data warehouses. Big data can turn enterprises into 'sensing' and 'proactive' enterprises that can prepare for and adapt to changing circumstances and upcoming opportunities. Big data provides the underpinning of context-awareness and business intelligence, allowing 'smart' decision-making which takes historical patterns, current situations, and future trends into account. Cost-efficient use of big data can create significant advantages in the firm-level value chain of each individual enterprise. But also beyond the enterprise boundaries, in industry-level and global value chains, big data can influence the decision-making process and create advantages at larger scales across industry actors and sectors.

However, cost-efficient use of big data by enterprises is challenging. Many data sources are typically used, which produce data with different formats, speeds, and volumes. This data needs to be handled by many interacting components in different systems for automated transformation, processing and analysis, as well as for representation according to adopted industry standards and interpretation according to prevailing industry models. Hence, data interoperability and integration is a major concern that must be addressed at different levels and along the extended value chain in order to realize the potential of big data.

The objective of the workshop is to bring together researchers and practitioners working on big data and enterprise interoperability, and to identify and discuss achievements, challenges, and visions in this area. The workshop seeks contributions addressing applications, architectures, methods and techniques regarding big data interoperability for enterprises. Suggested topics include, but are not limited to:

- Sensing and proactive enterprises
- Internet of enterprise-relevant things
- Smart and connected workplaces
- Business intelligence
- Business process monitoring, control & optimization
- Customer-connected enterprises



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- Big data in extended value chains
- Big data middleware
- Big data models and metamodels
- Big data enterprise domains, e.g. utilities, healthcare, manufacturing, transportation and logistics
- Big data enterprise interoperability framework and architectures
- Big data enterprise issues: quality, security, scalability, semantics, etc.
- Big data enterprise techniques: sensor network applications, ontologies, management & monitoring, etc.

Submission and publication information

The workshop welcomes submissions of various kinds of papers (research, industry, experience, work-in-progress, vision, position) which are relevant to the use of big data in enterprise organizations and enterprise networks, while addressing the problem of data interoperability and data integration. Papers should be formatted using the ISTE formatting guidelines, which can be downloaded from <http://www.iste.co.uk>. The recommended length of final papers is 6-10 pages in the ISTE format. Accepted papers of all workshops held in conjunction with I-ESA 2016 will be bundled in a post-conference proceedings published by ISTE Ltd and Wiley.

The procedure for paper submission consists of two phases, each with a quick review round, as follows: We solicit paper abstracts (approximately 1 page) before 15 January 2016. The abstracts will be reviewed by the programme committee, and on basis of the reviews authors will be notified whether their paper can be conditionally accepted. Corresponding full papers are then expected before 7 March 2016, which will again be reviewed, especially with respect to the suggestions given in the first review, with a resulting final notification in 16 March. All relevant dates are shown below.

Submissions should be made electronically in PDF format via the BDI4E submission page at EasyChair (<https://easychair.org/conferences/?conf=bdi4e>).

Important dates

Abstract submission: January 15, 2016

1st notification: January 30, 2016

Paper submission: March 7, 2016

2nd notification: March 16, 2016

Camera ready version: April 15, 2016

Workshop: March 29-30, 2016

Organising committee

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