

# [CfP] BigNovelTI: Novel Techniques for Integrating Big Data (ADBIS 2017 Workshop)

## ADBIS 2017 Workshop: Call for Papers

Workshop on Novel Techniques for Integrating Big Data (BigNovelTI) co-located with the 21st East-European Conference on Advances in Databases and Information Systems (ADBIS 2017)

*Hilton Cyprus Hotel, Nicosia, Cyprus*

*September 24, 2017*

<http://www.essi.upc.edu/dtim/bignovelti2017/>

### **Important Dates (all deadlines are Hawaii time)**

- Paper submission due: April 28, 2017 **UPDATED!**
- Acceptance notifications: June 2, 2017
- Final papers due: June 15, 2017
- Big NovelTI workshop: September 24, 2017 (co-located with ADBIS 2017)

The challenges posed by Big Data require novel data integration techniques beyond Data Warehousing (DW), which has been the in-company de-facto standard for data integration. On the one hand, bottom-up data integration approaches, performing a virtual integration, are a good fit for integrating disparate autonomous and heterogeneous data sources in large-scale distributed decision support systems, a current trend to contextualise the in-house data. However, virtual data integration tends to suffer from poor performance, which hinders the right-time analysis approach, and needs to be adapted and combined with materialisation to meet the new requirements brought by Big Data. On the other hand, variety and the need to deal with external non-controlled sources in an automatic way require to look at this problem from a broader perspective than the one of traditional data management, and semantics need to be included in the data integration processes. In such setting, domain knowledge is represented in an ontology, and inference over such knowledge is used to support data integration. However, this approach poses significant computational challenges that still need to be overcome, and hence its potential has not been fully exploited yet in real world applications. For these reasons, (i) providing different degrees of coupling of the integrated data sources based on their heterogeneity and autonomy, and (ii) dealing with and integrating semantics as a first-class citizen are open questions for novel scenarios.

The BigNovelTI workshop will be held in conjunction with the 21st East-European Conference on Advances in Databases and Information Systems (ADBIS 2017). Its main objective is to provide a forum for the dissemination of research accomplishments and to promote the interaction and collaboration between the data management and knowledge representation communities, which tackle data integration from different perspectives. BigNovelTI provides an international platform for the presentation of research on data integration in novel scenarios where volume, velocity, and variety (commonly known as Big Data settings) hold and require innovative solutions combining the strengths from both areas.

## Topics of Interest

Specific areas of interest to BigNovelTI 2017 are all those related to techniques for the integration of large-scale, distributed, and/or streaming data, and for other novel scenarios. Topics of interest include (but are not limited to):

- semantics extraction and annotation,
- semantic inference in the context of data integration,
- ontology alignment and integration,
- data quality and provenance,
- metadata management, storage, and querying,
- data modeling and evolution,
- ETL and data-intensive flow evolution,
- languages for querying integrated data and their optimisation,
- dealing with probabilistic and uncertain data,
- data contextualisation,
- data (source) discovery, provisioning, and recommendation,
- distributed transactions in the integration system,
- temporal and multi-version extensions,
- self-adaptive data integration systems.

## Submission

Submissions should present original results and substantial new work not currently under review or published elsewhere. We solicit three kinds of contributions on the above topics:

- Research papers and case studies (up to 12 pages)
- Ongoing work and promising research directions (e.g., to follow within a PhD) to be discussed with the community (up to 12 pages)
- Demo papers describing implemented systems, prototypes, and/or specific functionalities (up to 6 pages)

Papers must comply with the Communications in Computer and Information Science (CCIS) Springer formatting guidelines (instructions for CCIS authors are available at [ftp://ftp.springer.de/pub/tex/latex/svproc/guidelines/Springer\\_Guidelines\\_for\\_Authors\\_of\\_Proceedings.pdf](ftp://ftp.springer.de/pub/tex/latex/svproc/guidelines/Springer_Guidelines_for_Authors_of_Proceedings.pdf)).

Both LaTeX and Word submissions are welcome, however LaTeX submissions are suggested. Submissions must be uploaded by using EasyChair: <https://easychair.org/conferences/?conf=bignovelti2017>

## Publication

Camera-ready papers must be submitted in LaTeX. Accepted papers will be published by Springer-Verlag in a Communications in Computer and Information Science (CCIS) volume.

The best papers will be invited to be published in a special section of the International Journal of Applied Mathematics and Computer Science (AMCS) (De Gruyter Publisher). AMCS is on the Thomson Reuters master journal list

AMCS Impact Factor for 2015: 1.037 and 5-Year Impact Factor: 1.151

Notice that AMCS is an open-access journal with a publication fee of 30EUR/page for papers of 8-12 pages. The publication is scheduled for the first half of 2018. The selected workshop papers will have to be extended to a full size of 10-12 pages (AMCS style) and will have to include original research contributions. The final acceptance for the Journal will be based on a standard reviewing process

## Committees

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- Diego Calvanese, Free University of Bozen-Bolzano, Italy
- Oscar Romero, Universitat Politècnica de Catalunya, Spain

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