



## **International Journal on Digital Libraries**

### **Call for Papers**

### **Special Issue on Bibliometric-Enhanced Information Retrieval and Natural Language Processing for Digital Libraries**

Current digital libraries collect and allow access to digital papers and their metadata – but mostly do not analyze the full-text of the materials they index. The scale of scholarly publications poses a challenge for scholars in their search for relevant literature.

This special issue calls for new, unpublished article submissions on the analysis of scholarly publications and data, in the context of the explosion in the production of scientific literature and the growth of scientific enterprise. Articles in the issue will investigate how natural language processing, information retrieval, scientometric and recommendation techniques can advance the state of the art in scholarly document understanding, analysis and retrieval at scale. Researchers are in need of assistive technologies to track developments in an area, identify the approaches used to solve a research problem over time and summarize research trends. Digital libraries require semantic search, question-answering and automated recommendation and reviewing systems to manage and retrieve answers from scholarly databases. Full document text analysis can help to design semantic search, translation and summarization systems; citation and social network analyses can help digital libraries to visualize scientific trends, bibliometrics and relationships and influences of works and authors. All these approaches can be supplemented with the metadata supplied by digital libraries - such as the article title, journal or conference name, author information, language, datasets, keywords, section headers, citation relationships, topic terms - and even browsing and usage data, such as related search queries and download counts.

The issue aims to bring together the three communities of digital libraries (DL), information retrieval (IR) and natural language processing (NLP) to discuss the potential of automated textual analysis and bibliometrics to enhance scholarly discovery process. We thus are soliciting high-quality, previously unpublished submissions on topics including – but not limited to – full-text, multimedia and/or multilingual analysis of scholarly publications, as well as citation-based NLP or IR. Example fields of interests include (but are not limited to):

- Summarization of scientific articles; automatic creation of reviews and automatic qualitative assessment of submissions; question-answering for scholarly DLs
- Text and data mining technologies of scholarly articles to facilitate browsing and information-seeking

- Recommendation for scholarly papers, reviewers, citations and publication venues
- Navigation, searching and browsing in scholarly DLs; niche search in scholarly DLs; new information access methods for scientific papers
- Network analysis and citation analysis in scholarly DLs; citation function/motivation analysis; novel bibliometric metrics; topical modeling analysis; information retrieval for scholarly text, e.g.citation-based IR
- Knowledge discovery and analysis of information provenance
- Translation, multilingual and multimedia analysis and alignment of scholarly works; analyses of writing style in scholarly publications
- Methods for and applications of the automatic mining and discovery of structured and unstructured metadata
- Domain vocabularies and taxonomies for resource description and discovery
- Disambiguation issues in scholarly DLs using NLP or IR techniques; data cleaning and data quality

## Important Dates

- September 30, 2016 Paper submission deadline
- November 15, 2016 First notification
- January 15, 2017 Revision submission
- March 15, 2017 Second notification
- April 1, 2017 Final version submission

## Guest Editors

**Guillaume Cabanac**, University of Toulouse, France

**Muthu Kumar Chandrasekaran**, NUS School of Computing, Singapore

**Ingo Frommholz**, University of Bedfordshire, UK

**Kokil Jaidka**, Adobe Systems Inc., India

**Min-Yen Kan**, NUS School of Computing, Singapore

**Philipp Mayr**, GESIS – Leibniz Institute for the Social Sciences, Cologne, Germany

**Dietmar Wolfram**, University of Wisconsin-Milwaukee, USA

## Paper Submission

Papers submitted to this special issue for possible publication must be original and must not be under consideration for publication in any other journal or conference. Previously published or accepted conference papers must contain at least 30% new material to be considered for the special issue.

All papers are to be submitted by referring to <http://www.springer.com/799>. At the beginning of the submission process, under “Article Type”, please select the appropriate special issue. All manuscripts must be prepared according to the journal publication guidelines which can also be found on the website provided above. Papers will be reviewed following the journal’s standard review process.

Please address inquiries to Min-Yen Kan at [knmyn@gmail.com](mailto:knmyn@gmail.com).