5th International Workshop on Bibliometric-enhanced Information Retrieval (BIR2017)

Workshop at ECIR 2017 April 09, 2017

You are invited to participate in the upcoming 5th workshop on **Bibliometric-enhanced Information Retrieval (BIR)**, to be held as part of the 39th European Conference on Information Retrieval (ECIR). http://ecir2017.org/

Updates

- Workshop proceedings are available **http://ceur-ws.org/Vol-1823/**
- Authors of accepted papers will be invited to submit extended versions to a Special Issue on "Bibliometric-enhanced IR" to be published in the journal Scientometrics.
- Please be aware of the fact that at least one author per paper needs to register (one-day workshop at £ 180) for the workshop and attend the workshop to present the work.
- Workshop is in **Sir Ian Wood building, Robert Gordon University** (RGU), Room: **N344**

Agenda

Time	Speaker	
9:00-10:00	Get-together	
10:00	Organizers	Introduction Editorial Slides
10:15	Joeran Beel (Keynote)	Real-World Recommender Systems for Academia: The Pain and Gain in Building, Operating, and Researching them Paper Slides
11:15	Jason Rollins, Meredith McCusker, Joel Carlson and Jon Stroll	Manuscript Matcher: A Content and Bibliometrics-based Scholarly Journal Recommendation System Paper Slides
11:45	Mehmet Ali Abdulhayoglu and Bart Thijs	Use of Locality Sensitive Hashing (LSH) Algorithm to Match Web of Science and SCOPUS Paper Slides

Time	Speaker	
12.30-13.30	Lunch	
13:30	Xinyi Li and Maarten de Rijke	Academic Search in Response to Major Scientific Events [Paper](#) [Slides](#)
14:00	Felix Beierle, Akiko Aizawa and Joeran Beel	Exploring Choice Overload in Related-Article Recommendations in Digital Libraries [Paper](#) [Slides](#)
14.30-15.30	Poster session and Break	
	Stefan Langer and Joeran Beel	Apache Lucene as Content-Based-Filtering Recommender System: 3 Lessons Learned [Paper](#) [Poster](#)
	Andi Rexha, Mark Kröll, Hermann Ziak and Roman Kern	Extending Scientific Literature Search by Including the Author's Writing Style [Paper](#) [Poster](#)
	Bart Thijs	Drakkar: a graph based All-Nearest Neighbour Search Algorithm for Bibliographic Coupling [Paper](#) Poster
	Sophie Siebert, Siddarth Dinesh and Stefan Feyer	Extending a Research Paper Recommendation System with Bibliometric Measures [Paper](#) [Poster](#)
	Shenghui Wang and Rob Koopman	Semantic Embedding for Information Retrieval [Paper](#) [Poster](#)
15:30	Min-Gwan Seo, Seokwoo Jung, Kyung-min Kim and Sung-Hyon Myaeng	Computing Interdisciplinarity of Scholarly Objects using an Author-Citation-Text Model [Paper](#) [Slides](#)
16:00	Nguyen Minh Tien and Cyril Labbé	Detecting Automatically Generated Sentences with Grammatical Structure Similarity [Paper](#) [Slides](#)
16:30	Discussions	
17:00	End of workshop	
19:00	Informal dinner	

Important Dates

- Abstracts: 31 January 2017
- Submissions: 12 February 2017 (extended)
- Notification: 03 March 2017
- **Camera Ready Contributions: 24 March 2017**
- Workshop: 09 April 2017 in Aberdeen, Scotland UK

Introduction

Bibliometric techniques are not yet widely used to enhance retrieval processes in search systems, although they offer value-added effects for users. In this workshop we will explore how statistical modelling of scholarship, such as Bradfordizing or network analysis of coauthorship network, or simple citation graphs, can improve retrieval services for specific communities, as well as for large, cross-domain collections like Mendeley. This workshop aims to raise awareness of the missing link between Information Retrieval (IR) and bibliometrics/scientometrics and to create a common ground for the incorporation of bibliometric-enhanced services into retrieval at the scholarly search engine interface.

See proceedings of the former BIR workshops at ECIR 2014 <http://ceur-ws.org/Vol-1143/>, ECIR 2015 <http://ceur-ws.org/Vol-1344/>, ECIR 2016 <http://ceur-ws.org/Vol-1567/>, JCDL 2016 <http://ceur-ws.org/Vol-1610/>.

Aim of the Workshop

In this 5th workshop we aim to engage with the IR community about possible links to bibliometrics and complex network theory which also explores networks of scholarly communication. Bibliometric techniques are not yet widely used to enhance retrieval processes, yet they offer value-added effects for users. Our interests include information retrieval, information seeking, science modelling, network analysis, and natural language processing. The goal is to apply insights from bibliometrics, scientometrics, and informetrics to concrete practical problems of information retrieval and browsing.

Retrieval evaluations have shown that simple text-based retrieval methods scale up well but do not progress. Traditional retrieval has reached a high level in terms of measures like precision and recall, but scientists and scholars still face challenges present since the early days of digital libraries: mismatches between search terms and indexing terms, overload from result sets that are too large and complex, and the drawbacks of text-based relevance rankings. Therefore we will focus on statistical modelling and corresponding visualizations of the evolving science system. Such analyses have revealed not only the fundamental laws of Bradford and Lotka, but also network structures and dynamic mechanisms in scientific production. Statistical models of scholarly activities are increasingly used to evaluate specialties, to forecast and discover research trends, and to shape science policy. Their use as tools in navigating scientific information in search systems is a promising but still relatively new development. We will explore how statistical modelling of scholarship can improve retrieval services for specific communities, as well as for large, cross-domain collections. Some of these techniques are already used in working systems but not well integrated in larger scholarly IR environments.

The availability of new IR test collections that contain citation and bibliographic information like the iSearch collection or the ACL collection could deliver enough ground to interest (again) the IR community in these kind of bibliographic systems. The long-term research goal is to develop and evaluate new approaches based on informetrics and bibliometrics.

The aim of this workshop is to bring together researchers and practitioners from different domains, such as information retrieval, information seeking, science modelling, bibliometrics, scientometrics, network analysis, natural language processing, digital libraries, and approaches to visualize search and retrieval to move toward a deeper understanding of this research challenge.

Workshop Topics

To support the previously described goals the workshop topics include (but are not limited to) the following:

- IR for digital libraries and scientific information portals

- IR for scientific domains, e.g. social sciences, life sciences etc.

- Information Seeking Behaviour

- Bibliometrics, citation analysis and network analysis for IR

- Query expansion and relevance feedback approaches

- Science Modelling (both formal and empirical)

- Task based user modelling, interaction, and personalisation

- (Long-term) Evaluation methods and test collection design

- Collaborative information handling and information sharing

- Classification, categorisation and clustering approaches

- Information extraction (including topic detection, entity and relation extraction)

- Recommendations based on explicit and implicit user feedback

- Recommendation for scholarly papers, reviewers, citations and publication venues

- (Social) Book Search

- Information extraction (including topic detection, entity and relation extraction)

We especially invite descriptions of running projects and ongoing work. Papers that investigate multiple themes directly are especially welcome.

Submission Details

All submissions must be written in English following Springer LNCS author guidelines (6 to 12 pages) and should be submitted as PDF files to EasyChair. All submissions will be reviewed by at least two independent reviewers. Please be aware of the fact that at least one author per paper needs to register for the workshop and attend the workshop to present the work. In case of no-show the paper (even if accepted) will be deleted from the proceedings AND from the program.

Springer LNCS: http://www.springer.com/gp/computer-science/lncs/conference-proceedings-guidelines

EasyChair: **https://easychair.org/conferences/?conf=bir2017**

Workshop proceedings will be deposited online in the CEUR workshop proceedings publication service (ISSN 1613-0073) - This way the proceedings will be permanently available and citable (digital persistent identifiers and long term preservation).

Call for Papers: Special Issue on "Bibliometric-enhanced IR"

Authors of accepted papers are invited to submit extended versions to a Special Issue on "Bibliometric-enhanced IR" to be published in the journal Scientometrics.
This call for papers is moreover open for other authors which have not attended the workshop but working on "Bibliometric-enhanced IR" topics (see list of topics above). Before

submitting, authors need to consult the "Authors instructions" page on the Springer website. For any question please contact the workshop organizers (main contact: philipp.mayr(at)gesis(dot)org).
The preliminary timeline of the Special Issue is:

Deadline
Paper submission deadlineJune 30, 2017
First notification   July 30, 2017
Revision submission   August 30, 2017
Second notification   September 30, 2017
Final version submission   October 30, 2017

Programme Committee

This workshop is also informed by an ongoing COST Action TD1210 KnowEscape.

- IanaAtanassova, Centre Tesnière, Université de Franche-Comté, France

- Joeran Beel, Trinity College Dublin, Ireland

- Patrice Bellot, Aix-Marseille Université - CNRS (LSIS), France

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