

Preface to the 12th Workshop on Bibliometric-enhanced Information Retrieval at ECIR 2022

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Abstract

This preface summarizes the 12th Workshop on Bibliometric-enhanced Information Retrieval (BIR). BIR 2022 was held as hybrid event at April 10th, 2022, co-located with the 44th European Conference on Information Retrieval (ECIR 2022).

1. Introduction

These are the proceedings of the 12th Workshop on Bibliometric-enhanced Information Retrieval (BIR 2022)¹. Due to the pandemic situation, BIR 2022 was held as a hybrid event at the European Conference on Information Retrieval (ECIR) in Stavanger, Norway. The aim of the Bibliometric-enhanced Information Retrieval workshop series is to bring together researchers from different communities, especially scientometrics/bibliometrics and information retrieval. In doing so, BIR has a long-established tradition. It was launched at ECIR in 2014 [1] and has been held at ECIR each year since then. As the topic of our workshop lies at the intersection between IR and NLP, we also ran BIR as a joint workshop called BIRNDL (Bibliometric enhanced IR and NLP for Digital Libraries) at the JCDL and SIGIR conferences, respectively.

BIR 2022: 12th International Workshop on Bibliometric-enhanced Information Retrieval at ECIR 2022, April 10, 2022, hybrid.

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CEUR Workshop Proceedings (CEUR-WS.org)

¹All pointers to past and future workshops as well as to proceedings are hosted at <https://sites.google.com/view/bir-ws/>

2. Overview of the papers

This year five submissions were accepted as full papers. The submissions have been peer-reviewed and presented at the workshop. In addition, the workshop featured two keynote talks. All workshop contributions are documented on the workshop website². The following section briefly lists the various contributions. The respective extended abstracts and papers are contained in these proceedings.

2.1. Keynotes

We had two keynote speakers this year.

Frédérique Bordignon (École des Ponts ParisTech, France) Pitfalls and promises of BIR in science studies: A case study of mapping scientific articles to SDGs.

Mike Thelwall (University of Wolverhampton, UK) Can AI-estimated article quality be used to rank scholarly documents?

2.2. Research papers

The following research papers were presented in 2 sessions.

▷ Session 1

- Subhash Chandra Pujari, Fryderyk Mantiuk, Mark Giereth, Jannik Strötgen and Anemarie Friedrich:
Evaluating Neural Multi-Field Document Representations for Patent Classification
- Swayatta Daw and Vikram Pudi:
Long Tailed Entity Extraction of Model Names using Distant Supervision
- Michael Färber, Christoph Braun, Nicholas Popovic, Tarek Saier and Kristian Noullet:
Which Publications' Metadata Are in Which Bibliographic Databases? A System for Exploration

▷ Session 2

- Houcemeddine Turki, Bonaventure F. P. Dossou, Chris Chinenye Emezue, Mohamed Ali Hadj Taieb, Mohamed Ben Aouicha, Hanen Ben Hassen and Afif Masmoudi:
MeSH2Matrix: Machine learning-driven biomedical relation classification based on the MeSH keywords of PubMed scholarly publications
- Francisco Bolaños:
Mapping the Trending Topics of Bibliometric-enhanced Information Retrieval

²<https://sites.google.com/view/bir-ws/bir-2022>

3. Further reading

In 2020, the BIR organizers have edited a Special issue on “Scholarly literature mining with Information Retrieval and Natural Language Processing”³ in the journal *Scientometrics* (Springer). In total, fourteen papers on all aspects of academic search were accepted, see an overview [2].

Since 2016 we maintain the “Bibliometric-enhanced-IR Bibliography”⁴ that collects scientific papers which appeared in collaboration with the BIR/BIRNDL organizers.

Acknowledgments

The organizers wish to thank all those who contributed to this workshop series: the researchers who contributed papers, the many reviewers who generously offered their time and expertise, our keynote speakers, and the participants of the BIR and BIRNDL workshops.

We also like to thank the ECIR 2022 organisers for providing an environment that made BIR 2022 an enjoyable and exciting event.

References

- [1] P. Mayr, A. Scharnhorst, B. Larsen, P. Schaer, P. Mutschke, Bibliometric-Enhanced Information Retrieval, in: 36th European Conference on IR Research, ECIR 2014, Amsterdam, The Netherlands, April 13-16, 2014. Proceedings, Springer International Publishing, 2014, pp. 798–801. URL: <http://arxiv.org/abs/1310.8226>. doi:10.1007/978-3-319-06028-6_99.
- [2] G. Cabanac, I. Frommholz, P. Mayr, Scholarly literature mining with Information Retrieval and Natural Language Processing: Preface, *Scientometrics* 125 (2020) 2835–2840. doi:10.1007/s11192-020-03763-4.

³<https://sites.google.com/view/scientometrics-si2019-bir>

⁴https://github.com/PhilippMayr/Bibliometric-enhanced-IR_Bibliography/