

Preface

14th Workshop on Bibliometric-enhanced Information Retrieval at ECIR 2024

1. Introduction

These are the proceedings of the 14th Workshop on Bibliometric-enhanced Information Retrieval (BIR 2024)¹. BIR 2024 was held as a hybrid event at the European Conference on Information Retrieval (ECIR) in Glasgow, Scotland. 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.

2. Overview of the papers

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

2.1. Keynotes

The keynote was given by Hong Zhou from Wiley, who talked about *AI Impact for Information Discovery in Scholarly Publishing – from information gathering to knowledge application*.

In his talk, Hong Zhou showed how Artificial Intelligence (AI) is transforming information discovery in academic publishing by aggregating diverse content, aiding research, improving peer review, and enhancing content recommendations. The talk highlighted challenges faced by publishers, societies, and researchers, and presented real-world AI solutions, particularly those implemented on the Atypion platform, to improve discovery and user engagement in a more natural and interactive way.

2.2. Research papers

The following research papers were presented. All papers were peer-reviewed by at least 3 experts in the field.

- Juan Pablo Bascur, Suzan Verberne, Nees Jan van Eck and Ludo Waltman:
Which topics are visualized by science maps? A topic-driven clustering effectiveness analysis
- Christin Katharina Kreutz, Philipp Schaer and Ralf Schenkel:
Evaluating Stability of Information

Joint Proceedings of BIR 2024: 14th International Workshop on Bibliometric-enhanced Information Retrieval and IR4U2 2024: 1st Workshop on Information Retrieval for Understudied Users



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

²<https://sites.google.com/view/bir-ws/bir-2024>

- Gautam Kishore Shahi, Oliver Hummel:
Enhancing Research Information Systems with Identification of Domain Experts
- Iana Atanassova, Marc Bertin:
Breaking Boundaries in Citation Parsing: A Comparative Study of Generative LLMs and Traditional Out-of-the-box Citation Parsers
- Qinyue Liu, Amira Barhoumi and Cyril Labbé:
Miscitations in Scientific Papers: Dataset and Detection
- Anjalee De Silva, Janaka L. Wijekoon, Rashini Liyanarachchi, Rrubaa Panchendrarajan and Weranga Rajapaksha:
AI Insights: A Case Study on Utilizing ChatGPT Intelligence for Research Paper Analysis

3. Further reading

In 2020, the BIR organizers have edited a Special issue on Scholarly literature mining with Information Retrieval and Natural Language Processing³ 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 European Union funded the work by Philipp Mayr under the Horizon Europe grant OMINO (grant number 101086321). UK Research and Innovation (UKRI) guarantee-funded the work by Ingo Frommholz (grant number EP/X040496/1). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union, the European Research Executive Agency or UKRI. Neither the European Union nor European Research Executive Agency or UKRI can be held responsible for them.

The organisers 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 2024 organisers for providing an environment that made BIR 2024 an enjoyable and exciting event.

Declaration on Generative AI

During the preparation of this work, the authors used Grammarly for grammar and spelling checks. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the publication’s content.

The BIR 2024 Organisers

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

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

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References

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- [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.