ALTARS 2024 - 3rd Workshop on Augmented Intelligence for Technology-Assisted Reviews Systems: Evaluation Metrics and Protocols for eDiscovery and Systematic Review Systems.

Giorgio Maria Di Nunzio[1], Evangelos Kanoulas[2] and Prasenjut Majumder[3,4]

[1]*Department of Information Engineering, University of Padua, Italy*

[2]*Faculty of Science, Informatics Institute, University of Amsterdam, The Netherlands*

[3]*DAIICT, Gandhinagar, India*

[4]*TCG CREST, Kolkata, India*

Foreword to the ALTARS 2024 Proceedings

The inaugural Augmented Intelligence for Technology Assisted Review Systems (ALTARS) workshop, held at ECIR 2022[1] [1], initiated a multidisciplinary discussion on the outstanding questions and uncertainties within the research area of Technology Assisted Review (TAR) systems. The second edition of the workshop, held at ECIR 2023[2] [2], continued to explore the discussion about innovative approaches for assessing the effectiveness of TAR systems [3]. In fact, on the one hand, we have at our disposal various evaluation measures available to gauge the efficacy of "traditional" retrieval methods, on the other hand, TAR systems require additional dimensions of evaluation.

The desired outcome of this third workshop, held at ECIR 2024[3] [4], was having a collection of high-quality short papers to be presented at the event and a selected number of papers that will be invited in a new special issue and gather momentum in this interdisciplinary area together with researchers, stakeholders in the fields[4], and international projects[5].

The goals of the workshop were threefold:

- To foster cross-discipline collaborations between researchers with different perspectives and research backgrounds in the TAR systems;
- To combine and analyze existing theoretical and empirical contributions in order to determine shared issues, and novel research questions;
- To create a set of shared datasets dedicated towards the evaluation of TAR systems, thus enabling a wider research community to benefit from the outcomes of the workshop.

In accordance with the Open Science principles, ALTARS adopts a free and open access publication scheme through the CEUR Workshop Proceedings system (CEUR-WS.org). The submitted papers went through a double-blind review process that required at least two reviews by members of the international scientific committee paper. We accepted 2 long papers, 4 short papers, and 1 abstract that covered a meaningful variety of proposals. We also had two invited talks by: Enrico Francesconi from the Institute of Legal Informatics and Judicial Systems, National Research Council of Italy, Florence, with the title "A

[1]https://altars2022.dei.unipd.it/

[2]https://altars2023.dei.unipd.it/

[3]https://altars2023.dei.unipd.it/

[4]For example, https://icasr.github.io/ and https://www.zylab.com/en/

[5]For example, https://dossier-project.eu

Knowledge Modeling Approach for AI Applications Based on Legal Reasoning in the Semantic Web", and Franck Courchamp from University of Paris Saclay, France with the title "Extracting information from scientific articles to compile data on ecological impacts of biological invasions".

References

[1] G. M. Di Nunzio, E. Kanoulas, P. Majumder, Augmented Intelligence in Technology-Assisted Review Systems (ALTARS 2022): Evaluation Metrics and Protocols for eDiscovery and Systematic Review Systems, in: M. Hagen, S. Verberne, C. Macdonald, C. Seifert, K. Balog, K. Nørvåg, V. Setty (Eds.), Advances in Information Retrieval, Springer International Publishing, Cham, 2022, pp. 557–560. doi:10.1007/978-3-030-99739-7_69.

[2] G. M. Di Nunzio, E. Kanoulas, P. Majumder, Third Workshop on Augmented Intelligence in Technology-Assisted Review Systems (ALTARS 2024), in: N. Goharian, N. Tonellotto, Y. He, A. Lipani, G. McDonald, C. Macdonald, I. Ounis (Eds.), Advances in Information Retrieval, Springer Nature Switzerland, Cham, 2024, pp. 432–436. doi:10.1007/978-3-031-56069-9_59.

[3] G. Di Nunzio, E. Kanoulas, P. Majumder, 2nd workshop on augmented intelligence in technology-assisted review systems (ALTARS), in: J. Kamps, L. Goeuriot, F. Crestani, M. Maistro, H. Joho, B. Davis, C. Gurrin, U. Kruschwitz, A. Caputo (Eds.), Advances in Information Retrieval - 45th European Conference on Information Retrieval, ECIR 2023, Dublin, Ireland, April 2-6, 2023, Proceedings, Part III, volume 13982 of *Lecture Notes in Computer Science*, Springer, 2023, pp. 384–387. URL: https://doi.org/10.1007/978-3-031-28241-6_41. doi:10.1007/978-3-031-28241-6_41.

[4] G. M. Di Nunzio, E. Kanoulas, P. Majumder, 2nd Workshop on Augmented Intelligence in Technology-Assisted Review Systems (ALTARS 2023), in: J. Kamps, L. Goeuriot, F. Crestani, M. Maistro, H. Joho, B. Davis, C. Gurrin, U. Kruschwitz, A. Caputo (Eds.), Advances in Information Retrieval, Springer Nature Switzerland, Cham, 2023, pp. 384–387. doi:10.1007/978-3-031-28241-6_41.