## Curriculum Vitae

## Qualifications

- 2020-Present **PhD Student**, *Friedrich-Schiller-Universität Jena* Supervision by Prof. Dr. Matthias Hagen
  - 2017–2020 **Master of Science**, *Bielefeld University*, *Grade 1.1* Intelligent Systems
  - 2014–2017 **Bachelor of Science**, *Osnabrück University*, *Grade* 1.7 Cognitive Science

## **Employment History**

- 2022–Present **Researcher**, *Friedrich-Schiller Universtiät Jena*, Jena Improving the efficiency and effectiveness of transformer-based language models for document ranking and retrieval [3, 4, 5].
  - 2021–2022 **Researcher**, *Martin-Luther-University Halle–Wittenberg*, Halle Investigating the extraction of health-related information from biomedical publications and web pages with a particular focus on causal information [1, 2].
    - 2020 **Machine Learning Engineer**, *Prof. Dr. Dieter Bettin*, Papenburg Development of pipeline for extracting, evaluating, and aggregating evidence quality of biomedical publications to advance the automation of systematic reviews.
  - 2019–2020 **Machine Learning Engineer**, *matchmetrics GmbH*, Bielefeld Development of models for the prediction of soccer player performance across different seasons and leagues.
  - 2018–2019 **Student Assistant**, *Bielefeld University (Technical Faculty)*, Bielefeld Tutor for Introduction to Data Mining. Supervision of weekly exercises and lecture support.
  - 2018–2019 **Student Assistant**, *CITEC (CEEGE Project, Prof. Schack)*, Bielefeld Support for eye-tracking chess study. Development of API and analysis algorithms for combining data from an electronic chess board and eye tracker.

## **Publications**

- [1] Ferdinand Schlatt, Dieter Bettin, Matthias Hagen, Benno Stein, and Martin Potthast. Mining Health-related Cause-Effect Statements with High Precision at Large Scale. In *Proceedings of COLING 2022*, pages 1925–1936. International Committee on Computational Linguistics, October 2022. URL https://aclanthology.org/2022.coling-1.167.
- [2] Ferdinand Schlatt. Efficiently Scoring the Health-relatedness of Web Pages. In *Proceedings of the First International Workshop on Open Web Search (WOWS 2024)*, pages 14–22. CEUR Workshop Proceedings, March 2024. URL https://ceur-ws.org/Vol-3689/WOWS\_2024\_paper\_2.pdf.

- [3] Ferdinand Schlatt, Maik Fröbe, and Matthias Hagen. Investigating the Effects of Sparse Attention on Cross-Encoders. In *Proceedings of ECIR 2024*, volume 14608 of *Lecture Notes in Computer Science*, pages 173–190, Berlin Heidelberg New York, March 2024. Springer. URL https://link.springer.com/chapter/10.1007/978-3-031-56027-9\_11.
- [4] Ferdinand Schlatt, Maik Fröbe, Harrisen Scells, Shengyao Zhuang, Bevan Koopman, Guido Zuccon, Benno Stein, Martin Potthast, and Matthias Hagen. Set-Encoder: Permutation-Invariant Inter-Passage Attention for Listwise Passage Re-Ranking with Cross-Encoders. *CoRR*, April 2024. URL https://arxiv.org/abs/2404.06912.
- [5] Ferdinand Schlatt, Maik Fröbe, Harrisen Scells, Shengyao Zhuang, Bevan Koopman, Guido Zuccon, Benno Stein, Martin Potthast, and Matthias Hagen. A Systematic Investigation of Distilling Large Language Models into Cross-Encoders for Passage Re-ranking. *CoRR*, May 2024. URL https://arxiv.org/abs/2405.07920.