ANDREEA IANA

Mannheim, Germany

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RESEARCH INTERESTS

News Recommender Systems, Algorithmic Bias, Multilingual & Few-Shot Recommendation, Cross-lingual Transfer

EDUCATION

Ph.D. Computer Science, *University of Mannheim*   08/2020 - 07/2025
   Topics: Algorithmic Bias & Diversity in News Recommendation, Multilingual & Few-Shot Recommendation
   Advisors: Heiko Paulheim (University of Mannheim), Goran Glavaš (University of Würzburg)

M.Sc. Business Informatics (with honors), *University of Mannheim*   09/2017 - 07/2020
   Focus: Machine Learning, NLP, Deep Learning; Grade: 1.2*

B.Sc. Liberal Arts and Sciences (summa cum laude), *Maastricht University*   09/2013 - 07/2017
   Focus: Computer Science & Business Administration; Grade: 8.6** (top 1% of class)

* On a scale of 1.0 to 5.0 with 1.0 being the best possible grade; ** On a scale of 1.0 to 10.0 with 10.0 being the best possible grade

SELECTED PUBLICATIONS

[1] **Andreea Iana**, Goran Glavaš, Heiko Paulheim. MIND Your Language: A Multilingual Dataset for Cross-lingual News Recommendation, *SIGIR*, 2024.

[2] **Andreea Iana**, Goran Glavaš, and Heiko Paulheim. NewsRecLib: A PyTorch-Lightning Library for Neural News Recommendation, *EMNLP: System Demonstrations*, 2023.

[3] **Andreea Iana**, Goran Glavaš, Heiko Paulheim. Simplifying Content-Based Neural News Recommendation: On User Modeling and Training Objectives, *SIGIR*, 2023.

[4] Katharina Ludwig, Alexander Grote, **Andreea Iana**, Mehwish Alam, Heiko Paulheim, Harald Sack, Christof Weinhardt, Philipp Müller. Divided by the Algorithm? The (Limited) Effects of Content- and Sentiment-Based News Recommendation on Affective, Ideological, and Perceived Polarization, *Social Science Computer Review*, 2023.

[5] Anna Breit, Laura Waltersdorfer, Fajar J. Ekaputra, Marta Sabou, Andreas Ekelhart, **Andreea Iana**, Heiko Paulheim, Jan Portisch, Artem Revenko, Annette Ten Teije, Frank Van Harmelen. Combining Machine Learning and Semantic Web: A Systematic Mapping Study, *ACM Computing Surveys*, 2023.

[6] Mehwish Alam, **Andreea Iana**, Alexander Grote, Katharina Ludwig, Philipp Müller, Heiko Paulheim. Towards Analyzing the Bias of News Recommender Systems Using Sentiment and Stance Detection, *BeyondFacts*, 2022.

[7] **Andreea Iana**, Mehwish Alam, Heiko Paulheim. A Survey on Knowledge-aware News Recommender Systems, *Semantic Web*, 2022.

[8] **Andreea Iana**, Heiko Paulheim. GraphConfRec: A Graph Neural Network-Based Conference Recommender System, *JCDL*, 2021.

PROFESSIONAL EXPERIENCE

Research Associate, *University of Mannheim*   Mannheim (DE), 08/2020 - present
   Research on algorithmic bias in news recommendation; multilingual & few-shot recommendation; cross-lingual transfer in content-based recommendation; lean, robust, reproducible recommender systems
   Projects: ReNewRS (detecting, analyzing, preventing political polarization in news recommender systems)

Visiting Researcher, *University of Würzburg*   Würzburg (DE), 12/2023 - 02/2024
   Multilingual and cross-lingual news recommendation (host: Goran Glavaš, result: xMIND)

Student Research Assistant, *University of Mannheim*   Mannheim (DE), 11/2018 - 04/2020
   Projects: impact of A-box materialization on RDF2vec knowledge graph embeddings (result: CIKM workshop paper); entity matching in knowledge graphs; implementation of n-triples Cython parser
   Data wrangling in Pandas, RDFLib, gensim, SPARQL, Cython

TEACHING & SUPERVISION

Tutorials	Data Mining I & II
Bachelor & Master Theses	Supervision of theses on news & scientific research recommendation
Team Projects	News recommendation library & study-advice ChatBot development

SERVICE & ACTIVITIES

Program Committee	ARR, ISWC, ESWC, PoliticalNLP@LREC, BeyondFacts@WWW, DL4KG@ISWC
Journal Reviews	Journal of Web Semantics, Information Systems Journal
Open Source	NewsRecLib – news recommendation framework integrating PyTorch(-Lightning) & Hydra

SKILLS

Programming	excellent proficiency in Python, Linux CLI; good familiarity with Git, HPC with Slurm
ML Frameworks	advanced proficiency in PyTorch(-Lightning), Hydra, WandB, HuggingFace Transformers
Languages	Romanian (native), English (native-level, C2 level), German (intermediate proficiency, B1 level)