

# Priv.-Doz. Dr. Dominik Kowald

## Curriculum Vitae

Scholar: <https://scholar.google.at/citations?user=qQ-L8rUAAAAJ>

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### Education

- 2017–2024 **Priv.-Doz. (Habilitation), Applied Computer Science, TU Graz, Institute of Interactive Systems and Data Science (ISDS)**, Graz, Austria.  
*Thesis:* [Transparency, Privacy, and Fairness in Recommender Systems](#)
- 2012–2017 **Dr.techn. (Ph.D.), Computer Science, TU Graz, Institute of Interactive Systems and Data Science (ISDS)**, Graz, Austria, *with distinction*.  
*Thesis:* [Modeling Activation Processes in Human Memory to Improve Tag Recommendations](#)  
*Supervisors:* Prof. Stefanie Lindstaedt (TU Graz) & Prof. Tobias Ley (Tallinn University), advisor: Assoc.Prof. Elisabeth Lex (TU Graz)
- 2009–2012 **Dipl.Ing. (MSc.), Computer Science, TU Graz, Institute of Interactive Systems and Data Science (ISDS)**, Graz, Austria, *with distinction*.  
*Thesis:* [Combining Computer-Supported, Collaborative Learning with E-Assessment: Enhancing a Wiki System with Flexible Assessment Methods](#)  
*Supervisors:* Assoc.Prof. Christian Gütl (TU Graz), advisor: Assoc.Prof. Mohammad Al-Smadi (TU Graz)
- 2006–2009 **BSc., Computer Science, TU Graz, Institute of Interactive Systems and Data Science (ISDS)**, Graz, Austria.  
*Thesis:* [Peer Assessment in Computer Science and Modern Technologies to Build a Flexible E-Learning System around It](#)  
*Supervisor:* Assoc.Prof. Christian Gütl (TU Graz), *co-author:* Joachim Maderer
- 2001–2006 **Matura, Manufacturing Computer Science, College of Industrial Engineering (BULME), Business Informatics**, Graz, Austria, *with distinction*.  
*Project:* Implementation of a medical practice management system with online user administration

### Professional Positions Held

- since 2024 **Lecturer, University of Graz, Business Analytics and Data Science Center (BANDAS)**, Graz, Austria.  
*Teaching focus:* relational databases, query languages, business analytics
- since 2022 **Lecturer and Senior Researcher, TU Graz, Institute of Interactive Systems and Data Science (ISDS), FAIR-AI**, Graz, Austria.  
*Venia docendi:* scientific subject Applied Computer Science (since June 2024)  
*Teaching focus:* relational databases, data management, NoSQL databases, scientific writing with focus on recommender systems and trustworthy AI; [advanced teaching certificate](#) by [TU Graz teaching academy](#)
- since 2021 **Research Area Manager, Know-Center GmbH, FAIR-AI**, Graz, Austria.  
*Research focus:* trustworthy AI, reproducibility in machine learning, differential privacy in recommender systems, long-term dynamics of algorithmic fairness, popularity bias in recommender systems and information retrieval  
*Research visit:* [XAI group of Prof. Nava Tintarev, Maastricht University](#), The Netherlands (November 2021); funded by the [Provincial Government of Styria](#)  
*Team lead experience:* [Know-Center team lead certificate](#) by Wolfgang Eder HR development
- 2018–2021 **Deputy Research Area Manager, Know-Center GmbH, FAIR-AI (formerly called Social Computing)**, Graz, Austria.  
*Research focus:* psychology-informed recommender systems, social network analysis, multi-domain recommender systems, learning analytics
- 2012–2018 **Ph.D. Candidate and Researcher, Know-Center GmbH, FAIR-AI (formerly called Social Computing) and TU Graz, Institute of Interactive Systems and Data Science (ISDS)**, Graz, Austria.  
*Research focus:* cognitive-inspired recommender systems, social tagging and microblogging systems
- 2010–2012 **Research Project Assistant, TU Graz, Institute of Interactive Systems and Data Science (ISDS)**, Graz, Austria.  
*Research focus:* Wiki systems, e-assessment, technology-enhanced learning, Web technologies  
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## University Courses Taught

- since 2024 **Data Management**, [TU Graz](#), 4 ECTS, Bachelor Software Engineering & Management, Computer Science, Information & Computer Engineering.  
*Role:* [lecturer](#)
- since 2024 **Foundations of Digitalization**, [University of Graz](#), 4 ECTS, Bachelor Business Administration, Economics, Sociology.  
*Role:* [lectures on relational databases](#)
- since 2023 **Databases**, [TU Graz](#), 3 ECTS, Bachelor Information & Computer Engineering, Master Computational Social Systems, Electrical & Audio Engineering.  
*Role:* [lecturer](#)
- since 2023 **Introduction to Scientific Writing**, [TU Graz](#), 2 ECTS, Bachelor Information & Computer Engineering, Computer Science, Software Engineering & Management.  
*Role:* [offering seminar topics on trustworthy AI and recommender systems](#)
- 2016 **Science 2.0**, [TU Graz](#), 3 ECTS, Master Software Engineering & Management, Computer science.  
*Role:* [practical part](#)
- since 2014 **Guest Lectures**, [FH Joanneum](#) (recommender systems for journalism), [PUC Chile](#) (practical assignment, content-based recommender systems), [University of Graz](#) (AI reproducibility).
- 2014 **Web Science & Web Technology**, [TU Graz](#), 3 ECTS, Bachelor Software Engineering & Management, Master Information & Computer Engineering.  
*Role:* [practical part](#)
- 2011–2012 **Information Search & Retrieval**, [TU Graz](#), 5 ECTS, Master Software Engineering & Management, Computer Science, Information & Computer Engineering.  
*Role:* [practical part](#)
- 2009 **Data Structures & Algorithms**, [TU Graz](#), 1.5 ECTS, Bachelor Biomedical Engineering, Technical Mathematics, Software Engineering & Management, Computer Science, Information & Computer Engineering.  
*Role:* [student assistant](#)

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## Student Supervision and Mentoring

- since 2024 **Ph.D. thesis**, [TU Graz](#), Florian Atzenhofer-Baumgartner: *Recommender Systems in Digital Humanities*, Co-supervision with Prof. Georg Vogeler, [University of Graz](#).
- 2024 **Master's thesis**, [TU Graz](#), Andrea Forster: *Multi-stakeholder Recommender Systems*, Co-supervision with Prof. Stefan Thalmann, [University of Graz](#).
- 2024 **Master's thesis**, [TU Graz](#), Valentin Forster: *Detecting Price Anomalies Indicative of Antitrust Violations with Unsupervised Machine Learning*, Co-supervision with Prof. Stefan Thalmann, [University of Graz](#).
- 2024 **Master's thesis**, [TU Graz](#), Ioana Serban: *Bias in Public Datasets*.
- 2024 **Bachelor thesis**, [TU Graz](#), Gregor Autischer: *Practical Aspects of AI Certification*.
- 2023 **Bachelor thesis**, [TU Graz](#), Harald Semmelrock: *Reproducibility in Machine Learning-based Research*.
- 2023 **Bachelor thesis**, [TU Graz](#), Michael Pöchlinger: *Metrics to Measure Dataset Quality and Bias in Data*.
- 2022 **Bachelor thesis**, [TU Graz](#), Gregor Mayr: *Calibration in Recommender Systems*, Co-supervision with Assoc.Prof. Elisabeth Lex, [TU Graz](#).
- since 2020 **Ph.D. thesis**, [TU Graz](#), Peter Müllner: *Privacy in Recommender Systems*, Co-supervision with Assoc.Prof. Elisabeth Lex, [TU Graz](#).
- since 2020 **Ph.D. thesis**, [TU Graz](#), Tomislav Duricic: *Sparsity and Interpretability of Graph-based Recommender Systems*, Co-supervision with Assoc.Prof. Elisabeth Lex, [TU Graz](#).
- 2020 **Master's thesis**, [TU Graz](#), Mario Wagner: *Diversity-Aware Recommendation of Tweets*, Co-supervision with Assoc.Prof. Elisabeth Lex, [TU Graz](#).
- 2019 **Master's thesis**, [TU Graz](#), Peter Müllner: *Studying Non-Mainstream Listening Behavior For Music Recommendations*, Co-supervision with Assoc.Prof. Elisabeth Lex, [TU Graz](#).
- 2016 **Bachelor thesis**, [TU Graz](#), Andreas Punz: *Detection and Analysis of Communities on Twitter*, Co-supervision with Assoc.Prof. Elisabeth Lex, [TU Graz](#).

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## Session Chairing, Workshops, & Seminar Participation

- 2024 **Dagstuhl Seminar**, *Evaluation perspectives of recommender systems Dagstuhl seminar*, Schloß Dagstuhl, Germany, Role: participant.
- 2024 **CRBAM Workshop**, *Fair recommendations for cyclists workshop at 8th Cycling Research Board Annual Meeting (CRBAM)*, Zürich, Switzerland, Role: co-organizer.
- 2022 **DIH Süd Workshop**, *Recommender systems and trustworthy Digital Innovation Hub (DIH) Süd workshop*, Graz, Austria, Role: co-organizer.
- 2020 **Know-Center Summer Academy**, *Know-Center summer academy on recommender systems*, Graz, Austria, Role: co-organizer.
- 2018 **CIKM Conference**, *Recommendation track of the ACM CIKM*, Turin, Italy, Role: session chair.
- 2017 **RSBDA Workshop**, *Second workshop on recommender systems and big data analytics (RSBDA) at i-KNOW*, Graz, Austria, Role: co-organizer.
- 2016 **RSBDA Workshop**, *First workshop on recommender systems and big data analytics (RSBDA) at i-KNOW*, Graz, Austria, Role: co-organizer.
- 2015 **i-KNOW Conference**, *Social Computing track at i-KNOW*, Graz, Austria, Role: session chair.
- 2013 **i-KNOW Conference**, *Science 2.0 track at i-KNOW*, Graz, Austria, Role: session chair.

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## Awards

- 2024 **Outstanding Reviewer Award**, *ACM UMAP conference*, Cagliari, Italy.
- 2022 **Gender & Diversity Award**, *TU Graz Gender & Diversity*, Graz, Austria, 450€.
- 2018 **Ph.D. Thesis Award**, *Chamber of Labor Styria*, Graz, Austria, 650€.
- 2015 **Best Demo Honourable Mention**, *Demo track at i-KNOW conference*, Graz, Austria.
- 2014 **Best Poster Award**, *Poster track at Hypertext conference*, Santiago, Chile.

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## Project Grants

- 2024–2027 **HorizonEurope**, *Linked User-driven Multidisciplinary Exploration Network (LUMEN)*, 415K€ for Know-Center (83K€ for FAIR-AI), Role: key researcher.
- 2024–2025 **OpenWebSearch Third-Party Call**, *Trustworthy Access to Knowledge from the Indexed Web (TILDE)*, 100K€ for Know-Center (33K€ for FAIR-AI), Role: key researcher.
- 2024–2025 **FFG AI4Green**, *Strategic AI Roadmap for Mobility (SAIROM)*, 50K€ for Know-Center (25K€ for FAIR-AI), Role: key researcher.
- 2024–2025 **Styrian AI Future Fund**, *FairRecSys*, 74K€ for TU Graz (37K€ for FAIR-AI), Role: co-PI.
- 2023–2026 **FFG COMET Research Center**, *Know-Center - Research Center for Trustworthy AI*, 20.4M€ for Know-Center (3.4M€ for FAIR-AI), Role: research area manager for FAIR-AI.
- 2022–2026 **FFG COMET Module**, *Data-Driven Immersive Analytics (DDIA)*, 3.7M€ for Know-Center (350K€ for FAIR-AI), Role: key researcher for subproject on recommendations.
- 2022–2025 **FFG FemTech**, *Radreisen4All*, 150K€ for FAIR-AI at Know-Center, Role: key researcher.
- 2020–2023 **FFG COMET Module**, *Data-Driven Artificial Intelligence (DDAI)*, 3.7M€ for Know-Center (700K for Social Computing), Role: key researcher for subproject on explainable and private AI for users.
- 2020–2023 **Erasmus+**, *Cogsteps*, 130K€ for FAIR-AI at Know-Center and TU Graz, Role: key researcher.
- 2020–2022 **Horizon2020**, *Trusted Secure Data Sharing Space (TRUSTS)*, 730K€ for Know-Center (138k for Social Computing), Role: task lead.
- 2020–2022 **Horizon2020**, *TRIPLE*, 377K€ for Know-Center (120K for Social Computing), Role: co-task lead.
- 2020–2022 **Horizon2020**, *AI4EU*, 147K€ for Know-Center (73.5K for Social Computing), Role: co-task lead.
- 2019–2022 **FFG COMET Research Center**, *Know-Center - Research Center for Big Data Analytics*, 20.4M€ for Know-Center (3.4M for Social Computing), Role: deputy research area manager for Social Computing.
- 2019–2021 **FFG BASIS**, *Automated Marketing and Loyalty System for Retailers and Stores (Joloo)*, 120K€ for Social Computing at Know-Center, Role: researcher for recommender systems part.
- 2018–2020 **FFG BASIS**, *Studo App Sales Offensive*, 120K€ for Social Computing at Know-Center, Role: researcher for recommender systems part.

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- 2018–2020 **Styrian Health Fund**, *Health-Literacy und Diversity (HeLi-D)*, 75K€ for Know-Center (37.5K€ for Social Computing), *Role*: work package lead.
- 2018–2020 **OpenAIRE Tender Call**, *OpenAIRE Matchmaker*, 75K€ for Know-Center, *Role*: researcher.
- 2015–2018 **FFG Lighthouse**, *Data Market Austria (DMA)*, 75K€ for Know-Center (286K€ for Know-Center (170K€ for Social Computing), *Role*: researcher for recommender systems part.

## Membership and Activities in Professional Associations

- since 2024 **Austrian Standards**, *Committee for AI standardization*, *Role*: committee member.
- since 2023 **Big Data Value Association Task Force**, *Ethical and Trustworthy Artificial and Machine Intelligence (ETAMI) task force of the Big Data Value Association (BDVA)*, *Role*: task force member.
- since 2023 **Know-Center**, *Works Council of Know-Center*, *Role*: substitute member.
- since 2021 **Frontiers in Big Data**, *Editorial board of Recommender Systems Section*, *Role*: review editor.
- since 2014 **ACM**, *Association for Computing Machinery (ACM)*, *Role*: member (since 2017 professional member).

## Research Community Services

- **Reviewing for Journals**: *Journal of HCI*, *TIST*, *Frontiers in Psychology*, *Applied Soft Computing*, *EPJ Data Science*, *TWEB*, *TCSS*, *PlosOne*, *JSS*, *TKDE*, *IR Journal*, *SNAM*, *AJSE*, *TLT*
- **Journal Special Issue Editor**: *Frontiers in Big Data - Reviewers in Recommender Systems*
- **Reviewing for Conferences**: *SIGIR*, *ECAI*, *ECIR* (senior reviewer for reproducibility track), *ICWE*, *CIKM*, *WWW*, *IUI*, *HT*, *EuroCSS*, *RecSys*, *WebSci*, *OpenSym*, *UMAP*, *ECTEL* (senior reviewer)
- **Invited Research Talks**: *MediaFutures Bergen*, *Wissenschaftsforum Cologne*, *EBDVA*, *DataWeek*

## Peer-Reviewed Publications (\* indicates equal contributions)

- [1] Oleg Lesota, Jonas Geiger, Max Walder, Dominik Kowald, and Markus Schedl. Oh, behave! Country representation dynamics created by feedback loops in music recommender systems. In *RecSys'24*, 2024. URL <https://doi.org/10.48550/arXiv.2408.11565>.
- [2] Tomislav Duricic, Peter Müllner, Nicole Weidinger, Neven Elsayed, Dominik Kowald, and Eduardo Veas. Ai-powered immersive assistance for interactive task execution in industrial environments. In *ECAI'24*, 2024. URL <https://doi.org/10.48550/arXiv.2407.09147>.
- [3] Gustavo Escobeda, Marta Moscati, Peter Müllner, Simone Kopeinik, Dominik Kowald, Elisabeth Lex, and Markus Schedl. Making alice appear like bob: A probabilistic preference obfuscation method for implicit feedback recommendation models. In *ECML-PKDD'24*. Springer, 2024. URL <https://doi.org/10.48550/arXiv.2406.11505>.
- [4] Peter Müllner, Elisabeth Lex, Markus Schedl, and Dominik Kowald. The impact of differential privacy on recommendation accuracy and popularity bias. In *ECIR'24*. Springer, 2024. URL [https://doi.org/10.1007/978-3-031-56066-8\\_33](https://doi.org/10.1007/978-3-031-56066-8_33).
- [5] Armin Haberl, Jürgen Fleiß, Dominik Kowald, and Stefan Thalmann. Take the aTrain. Introducing an interface for the accessible transcription of interviews. *Journal of Behavioral and Experimental Finance*, 2024. URL <https://doi.org/10.1016/j.jbef.2024.100891>.
- [6] Florian Königsdorfer, Armin Haberl, Dominik Kowald, Tony Ross-Hellauer, and Stefan Thalmann. Black box or open science? A study on reproducibility in AI development papers. In *HICSS'24*, 2024. URL <https://hdl.handle.net/10125/106458>.
- [7] Dominik Kowald, Deqing Yang, and Emanuel Lacic. Editorial: Reviews in recommender systems. *Frontiers in Big Data*, 6, 2024. URL <https://doi.org/10.3389/fdata.2024.1384460>.
- [8] Dominik Kowald, Markus Reiter-Haas, Simone Kopeinik, Markus Schedl, and Elisabeth Lex. Transparent music preference modeling and recommendation with a model of human memory theory. In *A Human-centered Perspective of Intelligent Personalized Environments and Systems*. Springer, 2024. URL [https://doi.org/10.1007/978-3-031-55109-3\\_4](https://doi.org/10.1007/978-3-031-55109-3_4).
- [9] Peter Müllner, Elisabeth Lex, Markus Schedl, and Dominik Kowald. ReuseKNN: Neighborhood reuse for differentially private KNN-based recommendations. *ACM TIST*, 14(5), 2023. URL <https://doi.org/10.1145/3608481>.
- [10] Sebastian Scher, Simone Kopeinik, Andreas Trügler, and Dominik Kowald. Modelling the long-term fairness dynamics of data-driven targeted help on job seekers. *Nature Scientific Reports*, 13(1), 2023. URL <https://doi.org/10.1038/s41598-023-28874-9>.
- [11] Peter Müllner, Elisabeth Lex, Markus Schedl, and Dominik Kowald. Differential privacy in collaborative filtering recommender systems: A review. *Frontiers in Big Data*, 6, 2023. URL <https://doi.org/10.3389/fdata.2023.1249997>.
- [12] Tomislav Duricic, Dominik Kowald, Emanuel Lacic, and Elisabeth Lex. Beyond-accuracy: A review on diversity, serendipity and fairness in recommender systems based on graph neural networks. *Frontiers in Big Data*, 6, 2023. URL <https://doi.org/10.3389/fdata.2023.1251072>.
- [13] Marta Moscati, Christian Wallmann, Markus Reiter-Haas, Dominik Kowald, Elisabeth Lex, and Markus Schedl. Integrating the ACT-R framework with collaborative filtering for explainable sequential music recommendation. In *RecSys'23*, 2023. URL <https://doi.org/10.1145/3604915.3608838>.



- [14] Emanuel Lacic, Tomislav Duricic, Leon Fadljevic, Dieter Theiler, and Dominik Kowald. Uptrendz: API-centric real-time recommendations in multi-domain settings. In *ECIR'23*. Springer, 2023. URL [https://doi.org/10.1007/978-3-031-28241-6\\_23](https://doi.org/10.1007/978-3-031-28241-6_23).
- [15] Dominik Kowald\*, Gregor Mayr\*, Markus Schedl, and Elisabeth Lex. A study on accuracy, miscalibration, and popularity bias in recommendations. In *BIAS'23*, pages 1–16. Springer, 2023. URL [https://doi.org/10.1007/978-3-031-37249-0\\_1](https://doi.org/10.1007/978-3-031-37249-0_1).
- [16] Peter Muellner, Stefan Schmerda, Dieter Theiler, Stefanie Lindstaedt, and Dominik Kowald. Towards employing recommender systems for supporting data and algorithm sharing. In *DataEconomy@CoNext'22*, 2022. URL <https://doi.org/10.1145/3565011.3569055>.
- [17] Emanuel Lacic, Leon Fadljevic, Franz Weissenboeck, Stefanie Lindstaedt, and Dominik Kowald. What drives readership? An online study on user interface types and popularity bias mitigation in news article recommendations. In *ECIR'22*, 2022. URL [https://doi.org/10.1007/978-3-030-99739-7\\_20](https://doi.org/10.1007/978-3-030-99739-7_20).
- [18] Dominik Kowald and Emanuel Lacic. Popularity bias in collaborative filtering-based multimedia recommender systems. In *BIAS'22*. Springer, 2022. URL [https://doi.org/10.1007/978-3-031-09316-6\\_1](https://doi.org/10.1007/978-3-031-09316-6_1).
- [19] Dominik Kowald, Peter Muellner, Eva Zangerle, Christine Bauer, Markus Schedl, and Elisabeth Lex. Support the underground: Characteristics of beyond-mainstream music listeners. *EPJ Data Science*, 10(1), 2021. URL <https://doi.org/10.1140/epjds/s13688-021-00268-9>.
- [20] Elisabeth Lex, Dominik Kowald, Paul Seitlinger, Thi Ngoc Trang Tran, Alexander Felfernig, Markus Schedl, et al. Psychology-informed recommender systems. *Foundations and Trends® in Information Retrieval*, 15(2), 2021. URL <https://doi.org/10.1561/1500000090>.
- [21] Markus Schedl, Christine Bauer, Wolfgang Reisinger, Dominik Kowald, and Elisabeth Lex. Listener modeling and context-aware music recommendation based on country archetypes. *Frontiers in AI*, 3, 2021. URL <https://doi.org/10.3389/frai.2020.508725>.
- [22] Peter Muellner, Dominik Kowald, and Elisabeth Lex. Robustness of meta matrix factorization against strict privacy constraints. In *ECIR'21*. Springer, 2021. URL <https://doi.org/10.1007/978-3-030-72240-1>.
- [23] Oleg Lesota, Alessandro Melchiorre, Navid Rekabsaz, Stefan Brandl, Dominik Kowald, Elisabeth Lex, and Markus Schedl. Analyzing item popularity bias of music recommender systems: Are different genders equally affected? In *RecSys'21*, 2021. URL <https://doi.org/10.1145/3460231.3478843>.
- [24] Tomislav Duricic, Dominik Kowald, Markus Schedl, and Elisabeth Lex. My friends also prefer diverse music: Homophily and link prediction with user preferences for mainstream, novelty, and diversity in music. In *MSDNS@ASONAM'21*, 2021. URL <https://doi.org/10.1145/3487351.3492706>.
- [25] Elisabeth Lex\*, Dominik Kowald\*, and Markus Schedl. Modeling popularity and temporal drift of music genre preferences. *TISMIR*, 3(1), 2020. URL <https://doi.org/10.5334/tismir.39>.
- [26] Emanuel Lacic, Markus Reiter-Haas, Dominik Kowald, Manoj Reddy Dareddy, Junghoo Cho, and Elisabeth Lex. Using autoencoders for session-based job recommendations. *UMUAI*, 30, 2020. URL <https://doi.org/10.1007/s11257-020-09269-1>.
- [27] Dominik Kowald, Markus Schedl, and Elisabeth Lex. The unfairness of popularity bias in music recommendation: A reproducibility study. In *ECIR'20*. Springer, 2020. URL [https://doi.org/10.1007/978-3-030-45442-5\\_5](https://doi.org/10.1007/978-3-030-45442-5_5).
- [28] Dominik Kowald\*, Elisabeth Lex\*, and Markus Schedl. Utilizing human memory processes to model genre preferences for personalized music recommendations. In *HUMANIZE@IUI'20*. ACM, 2020. URL <https://doi.org/10.48550/arXiv.2003.10699>.
- [29] Tomislav Duricic, Hussain Hussain, Emanuel Lacic, Dominik Kowald, Denis Helic, and Elisabeth Lex. Empirical comparison of graph embeddings for trust-based collaborative filtering. In *ISMIS'20*. Springer, 2020. URL [https://doi.org/10.1007/978-3-030-59491-6\\_17](https://doi.org/10.1007/978-3-030-59491-6_17).
- [30] Leon Fadljevic, Katharina Maitz, Dominik Kowald, Viktoria Pammer-Schindler, and Barbara Gasteiger-Klipcera. Slow is good: The effect of diligence on student performance in the case of an adaptive learning system for health literacy. In *LAK'20*, 2020. URL <https://doi.org/10.1145/3375462.3375502>.
- [31] Adolfo Ruiz-Calleja, Sebastian Dennerlein, Dominik Kowald, Dieter Theiler, Elisabeth Lex, and Tobias Ley. An infrastructure for workplace learning analytics: Tracing knowledge creation with the Social Semantic Server. *Journal of Learning Analytics*, 6(2), 2019. URL <http://dx.doi.org/10.18608/jla.2019.62.9>.
- [32] Simone Kopeinik, Elisabeth Lex, Dominik Kowald, Dietrich Albert, and Paul Seitlinger. A real-life school study of confirmation bias and polarisation in information behaviour. In *ECTEL'19*, 2019. URL [https://doi.org/10.1007/978-3-030-29736-7\\_31](https://doi.org/10.1007/978-3-030-29736-7_31).
- [33] Ilire Hasani-Mavriqi, Dominik Kowald, Denis Helic, and Elisabeth Lex. Consensus dynamics in online collaboration systems. *Computational Social Networks*, 5(1), 2018. URL <https://doi.org/10.1186/s40649-018-0050-1>.
- [34] Dominik Kowald, Paul Seitlinger, Tobias Ley, and Elisabeth Lex. The impact of semantic context cues on the user acceptance of tag recommendations: An online study. In *WWW'18*, 2018. URL <https://doi.org/10.1145/3184558.3186899>.
- [35] Mathieu d'Aquin, Dominik Kowald, Angela Fessel, Elisabeth Lex, and Stefan Thalmann. AFEL-analytics for everyday learning. In *WWW'18*, 2018. URL <https://doi.org/10.1145/3184558.3186206>.
- [36] Tomislav Duricic, Emanuel Lacic, Dominik Kowald, and Elisabeth Lex. Trust-based collaborative filtering: Tackling the cold start problem using regular equivalence. In *RecSys'18*, 2018. URL <https://doi.org/10.1145/3240323.3240404>.
- [37] Dominik Kowald, Emanuel Lacic, Dieter Theiler, and Elisabeth Lex. AFEL-REC: A recommender system for providing learning resource recommendations in social learning environments. In *SIR@CIKM'18*, 2018. URL <https://ceur-ws.org/Vol-2482/paper46.pdf>.

- [38] Emanuel Lacic, Dominik Kowald, and Elisabeth Lex. Neighborhood troubles: On the value of user pre-filtering to speed up and enhance recommendations. In *EYRE@CIKM'18*, 2018. URL <https://ceur-ws.org/Vol-2482/paper9.pdf>.
- [39] Emanuel Lacic, Dominik Kowald, Markus Reiter-Haas, Valentin Slawicek, and Elisabeth Lex. Beyond accuracy optimization: On the value of item embeddings for student job recommendations. In *IFUP@WSDM'18*, 2018. URL <https://doi.org/10.48550/arXiv.1711.07762>.
- [40] Paul Seitlinger, Tobias Ley, Dominik Kowald, Dieter Theiler, Ilire Hasani-Mavriqi, Sebastian Dennerlein, Elisabeth Lex, and Dietrich Albert. Balancing the fluency-consistency tradeoff in collaborative information search with a recommender approach. *Int. Journal of HCI*, 34(6), 2018. URL <https://doi.org/10.1080/10447318.2017.1379240>.
- [41] Dominik Kowald, Subhash Chandra Pujari, and Elisabeth Lex. Temporal effects on hashtag reuse in Twitter: A cognitive-inspired hashtag recommendation approach. In *WWW'17*, 2017. URL <https://doi.org/10.1145/3038912.3052605>.
- [42] Dominik Kowald, Simone Kopeinik, and Elisabeth Lex. The TagRec framework as a toolkit for the development of tag-based recommender systems. In *UMAP'17 Adjunct*, 2017. URL <https://doi.org/10.1145/3099023.3099069>.
- [43] Simone Kopeinik, Dominik Kowald, Ilire Hasani-Mavriqi, and Elisabeth Lex. Improving collaborative filtering using a cognitive model of human category learning. *The Journal of Web Science*, 2(1), 2017. URL <http://dx.doi.org/10.1561/106.00000007>.
- [44] Dominik Kowald and Elisabeth Lex. The influence of frequency, recency and semantic context on the reuse of tags in social tagging systems. In *HT'16*, 2016. URL <https://doi.org/10.1145/2914586.2914617>.
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