

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*.
Matura 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 and digitalization
- since 2022 **Lecturer and Senior Researcher, *TU Graz, Institute of Interactive Systems and Data Science (ISDS)***, Graz, Austria.
Venia docendi: scientific subject Applied Computer Science (since June 2024)
Teaching focus: relational databases, data management and data science, NoSQL databases, scientific writing with focus on recommender systems, trustworthy AI, data science, and machine learning
- since 2021 **Research Area Manager, *Know Center Research 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, responsible machine learning and data science
Research visit: XAI group of Prof. Nava Tintarev, Maastricht University, The Netherlands (November 2021); funded by the Provincial Government of Styria

- 2017–2021 **Deputy Research Area Manager**, [Know Center Research GmbH, FAIR-AI \(formerly called Social Computing\)](#), Graz, Austria.
Research focus: psychology-informed recommender systems, social data science, multi-domain recommender systems, data platforms, microservice-based software architectures, machine learning
- 2012–2017 **Ph.D. Candidate and Researcher**, [Know Center Research 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 data science
- 2010–2012 **Research Project Assistant**, [TU Graz, Institute of Interactive Systems and Data Science \(ISDS\)](#), Graz, Austria.
Research focus: collaborative Web systems, e-assessment, learning analytics, Web technologies

University Courses Taught

- since 2024 **Data Management**, [TU Graz](#), 4 ECTS, Bachelor Software Engineering & Management, Computer Science, Information & Computer Engineering.
Role: [lecturer](#) (~500 students)
- since 2024 **Foundations of Digitalization**, [University of Graz](#), 4 ECTS, Bachelor Business Administration, Economics, Sociology.
Role: [lecturer responsible for course content on relational databases](#) (~500 students)
- since 2024 **Privatissimum**, [TU Graz](#), Doctoral school, Trustworthy AI and recommender systems.
Role: [mentoring Ph.D. students](#) (~1 to 2 students)
- 2024 **Case Studies Business Analytics**, [University of Graz](#), Guest lecture, AI reproducibility.
Role: [guest lecturer on reproducibility of AI-driven research](#) (~50 students)
- since 2023 **Databases**, [TU Graz](#), 3 ECTS, Bachelor Information & Computer Engineering, Master Computational Social Systems, Electrical & Audio Engineering.
Role: [lecturer](#) (~100 students)
- 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](#) (~1 to 10 students)
- 2022 **Journalism and Public Relations**, [FH Joanneum](#), Guest lecture, News recommender systems.
Role: [guest lecturer on news recommender systems for journalists](#) (~50 students)
- 2016 **Science 2.0**, [TU Graz](#), 3 ECTS, Master Software Engineering & Management, Computer science.
Role: [course assistant responsible for the exercises](#) (~50 students)
- 2014 **Recommender Systems**, [PUC Chile](#), Practical assignment, Content-based recommender systems.
Role: [guest course assistant responsible for one exercise](#) (~50 students)
- 2014 **Web Science & Web Technology**, [TU Graz](#), 3 ECTS, Bachelor Software Engineering & Management, Master Information & Computer Engineering.
Role: [course assistant responsible for the exercises](#) (~200 students)
- 2011–2012 **Information Search & Retrieval**, [TU Graz](#), 5 ECTS, Master Software Engineering & Management, Computer Science, Information & Computer Engineering.
Role: [course assistant responsible for the exercises](#) (~100 students)
- 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 \(tutor\) responsible for one exercise group](#) (~30 students)

Student Supervision, Mentoring, & Examination Committee Member

- since 2025 **Master's thesis**, [TU Graz](#), Juergen Stumpf: *Regulation and Governance of AutoML Tools in Industrial Settings*, Co-supervision with Prof. Stefan Thalmann, [University of Graz](#).
- 2025 **Master's thesis**, [TU Graz](#), Valentin Forster: *Detecting Price Anomalies Indicative of Antitrust Violations with Machine Learning*, Co-supervision with Dr. Juergen Fleiss, [University of Graz](#).
- 2025 **Examination committee chairperson**, [TU Graz](#), Thomas Zenkl: *The Trouble with Algorithms: Conceptualizing Algorithmic Breaching Experiments*, Master's exam with Prof. Juliane Jarke, [University of Graz](#), and Assoc.Prof. Bernhard Wieser, [TU Graz](#).
- since 2024 **Ph.D. thesis**, [TU Graz](#), Florian Atzenhofer-Baumgartner: *Recommender Systems in Digital Humanities*, Co-supervision with Prof. Georg Vogeler, [University of Graz](#).
- since 2024 **Master's thesis**, [TU Graz](#), Andrea Forster: *Popularity Bias in Point-of-interest Recommender Systems*, Co-supervision with Prof. Stefan Thalmann, [University of Graz](#).
- 2024 **Examination committee chairperson**, [TU Graz](#), Sara Skardelly: *Environmental (In)justice: Vienna as Best Practice?*, Master's exam with Prof. Juliane Jarke, [University of Graz](#), and Assoc.Prof. Bernhard Wieser, [TU Graz](#).
- 2024 **Internship**, [Know Center Research GmbH](#), Adrian Marangoni: *Fairness in AI for Mobility*.
- 2024 **Master's thesis and internship**, [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*.
- 2023 **Internship**, [Know Center Research GmbH](#), Gökay Yildirim: *Popularity Bias in Recommender Systems*.
- 2022 **Bachelor thesis and Master's project**, [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](#).

Workshop Organization & Session Chairing

- 2025 **UMAP Workshop**, [Hybrid AI for Human-Centric Personalization Workshop co-located with UMAP'25](#), New York City, United States, Role: co-organizer.
- 2025 **ReproAI Workshop**, [Reproducibility and AI Workshop co-located with "Yes, we are open" Weizenbaum Institute Conference](#), Berlin, Germany, Role: co-organizer.
- 2025 **STS Workshop**, [Fairness and Artificial Intelligence workshop at the 23rd Conference on Critical Issues in Science, Technology and Society Studies](#), Graz, Austria, Role: co-organizer.

- 2024 **CRBAM Workshop**, *Fair recommendations for cyclists workshop at 8th Cycling Research Board Annual Meeting (CRBAM)*, Zurich, Switzerland, Role: co-organizer.
- 2022 **DIH Süd Workshop**, *Digital Innovation Hub (DIH) Süd workshop on recommender systems and trustworthy AI*, Graz, Austria, Role: co-organizer.
- 2020 **BigData Summer Academy**, *Know Center Research GmbH summer academy on recommender systems*, Graz, Austria, Role: co-organizer.
- 2018 **ACM CIKM**, *Recommendation track of ACM CIKM'18*, Turin, Italy, Role: session chair.
- 2017 **RSBDA Workshop**, *Second workshop on recommender systems and big data analytics (RSBDA) at i-KNOW'17*, Graz, Austria, Role: co-organizer.
- 2016 **RSBDA Workshop**, *First workshop on recommender systems and big data analytics (RSBDA) at i-KNOW'16*, Graz, Austria, Role: co-organizer.
- 2015 **i-KNOW**, *Social Computing track at i-KNOW'15*, Graz, Austria, Role: session chair.
- 2013 **i-KNOW**, *Science 2.0 track at i-KNOW'13*, Graz, Austria, Role: session chair.

Awards & Honours

- 2024 **Outstanding Reviewer Award**, *ACM UMAP'24*, Cagliari, Italy.
- 2022 **Mind-the-gap Award**, *TU Graz Gender & Diversity department*, Graz, Austria, worth 450€.
- 2018 **Ph.D. Thesis Award**, *Chamber of Labor Styria*, Graz, Austria, worth 650€.
- 2015 **Best Demo Honourable Mention**, *Demo track at i-KNOW'15*, Graz, Austria.
- 2014 **Best Poster Award**, *Poster track at Hypertext'14*, Santiago, Chile.

Project Grants & Research Funding

- 2025–2027 **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 and LLMs.
- 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 FAIR-AI), 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.
- 2018–2020 **FFG BASIS**, *Studo App Sales Offensive*, 120k€ for Social Computing at Know Center, *Role*: researcher for recommender systems.
- 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)*, 286k€ for Know Center (170k€ for Social Computing), *Role*: researcher for recommender systems.

Selected Media Reactions & Scientific Dissemination to the Public

- 2024 **Trend**, *Der AI Act - Chance für Europa*, News Article on legal aspects of trustworthy AI, *Language*: German.
- 2024 **MediaFutures**, *Transparency, privacy and fairness in recommender systems*, News article on trustworthiness aspects of recommender systems, *Language*: English.
- 2023 **DerStandard**, *Wie Recruiting mit KI in Zukunft auch ohne Diskriminierung möglich ist*, News article on fair AI in the labor market, *Language*: German.
- 2022 **APA Science**, *Digitale Stereotype*, News article on fairness in AI, *Language*: German.
- 2022 **APA Science**, *Wie digitale Stereotype aus der Welt geschafft werden sollen*, News article on popularity bias in recommender systems, *Language*: German.
- 2022 **TU Graz**, *Research and Teaching for Equal Opportunities*, News article about the winners of the TU Graz Mind-the-gap gender and diversity award, *Language*: English.
- 2021 **BiomedCentral**, *Algorithm-Generated Music Recommendations: Low Accuracy for Fans of Beyond-Mainstream Music*, News article on beyond-mainstream users in music recommender systems, *Language*: English.

Additional Technical, Leadership, & Gender Mainstreaming Qualifications

- 2023 **Leadership**, *Wolfgang Eder HR development*, *Future team lead certificate*, Know Center Research GmbH team lead programme on gender- and diversity-sensitive leading strategies.
- 2022–2025 **FFG Femtech**, *Key researcher for FFG Femtech project including a Femtech internship*, gender- and diversity-sensitive recommender systems in Radreisen4All project.
- 2022 **Gender & Diversity Award**, *TU Graz Gender, Diversity and Equal Opportunity*, Awarded for my research on fairness, diversity, and gender and popularity bias in recommender systems.
- 2023 **Teaching**, *TU Graz Teaching Academy*, *Advanced teaching certificate*, Didactics and communication skills for gender- and diversity-sensitive teaching and mentoring techniques.
- 2023 **Summer school**, *Recommender systems summer school*, Participant, Copenhagen, Denmark.
- 2019 **Summer school**, *Computational Social Science summer school on methods for analyzing multimedia data*, Participant, Berlin, Germany.

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*: member.

FAIR-AI, Know Center Research GmbH & TU Graz – Sandgasse 34 – Graz, Austria

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- since 2023 **Know Center Research GmbH**, [Works Council of Know Center Research GmbH](#), Role: substitute member.
- since 2021 **Frontiers in Big Data**, [Editorial board of Recommender Systems Section](#), Role: review editor and research topic editor.
- since 2014 **ACM**, [Association for Computing Machinery \(ACM\)](#), Role: member (since 2017: professional member).

Selected Research Talks

- 2025 **HabilTalk**, *Invited talk on transparency, privacy, and fairness in recommender systems as part of the HabilTalk series of [TU Graz](#)*, Graz, Austria.
- 2024 **OEGGF**, *Contributing talk on fair AI in the labor market at the [10. Tagung der Oesterreichischen Gesellschaft für Geschlechterforschung \(OEGGF\)](#)*, Graz, Austria.
- 2024 **AI-Know**, *Contributing talk on evaluation and certification of trustworthy AI at [AI-Know](#)*, Graz, Austria.
- 2024 **MediaFutures**, *Invited talk on trustworthy recommender systems and research/industry collaborations at [MediaFutures SFI](#)*, Bergen, Norway.
- 2024 **Wissenschaftsforum**, *Invited speaker and panelist on fair AI in the labor market at the [Wissenschaftsforum](#)*, Cologne, Germany.
- 2023 **BIAS**, *Contributing talk on recommendation calibration at [BIAS@ECIR](#)*, Dublin, Ireland.
- 2022 **EBDVA**, *Invited panelist and speaker on trustworthy AI and EU AI Act as part of the [European Big Data Value Forum](#)*, Prague, Czech Republic.
- 2021 **DataWeek**, *Invited panelist and speaker on breaking silos in data innovation in Europe as part of [BDVA Data Week](#)*, online due to COVID-19.
- 2020 **ECIR**, *Contributing talk on music recommendations at [ECIR](#)*, online due to COVID-19.
- 2019 **EUROCSS**, *Contributing talk on network polarization at [EUROCSS](#)*, Zurich, Switzerland.
- 2018 **CIKM**, *Contributing talk on social recommendations at [CIKM](#)*, Turin, Italy.
- 2017 **UMAP**, *Contributing talk on recommendation frameworks at [UMAP](#)*, Bratislava, Slovakia.
- 2017 **WebConf**, *Contributing talk on hashtag recommendations at the [WebConf](#)*, Perth, Austria.
- 2016 **Hypertext**, *Contributing talk on cognitive models in tagging at [Hypertext](#)*, Halifax, Canada.
- 2015 **RecSys**, *Contributing talk on recommendation evaluation at [RecSys](#)*, Vienna, Austria.
- 2014 **WWW**, *Contributing talk on cognitive-inspired recommendation at [WWW](#)*, Seoul, Korea.

Selected Research Community Services

- 2022-2023 **Journal Special Issue Editor**, [Frontiers in Big Data - Reviews in Recommender Systems](#), (co-) editor of 10 review articles in the field of recommender systems.
- since 2021 **Journal Review Editor**, [Frontiers in Big Data - Recommender Systems Section](#).
- since 2020 **Senior Program Committee Member**, [ECAI](#), [ECIR](#) (reproducibility track), [ECTEL](#).
- since 2017 **Reviewing for Journals and Books**, [TORS](#), [Journal of HCI](#), [TIST](#), [Frontiers in Psychology](#), [Applied Soft Computing](#), [EPJ Data Science](#), [HUMANIZE](#), [TWEB](#), [TCSS](#), [PlosOne](#), [JSS](#), [TKDE](#), [IR Journal](#), [SNAM](#), [AJSE](#), [TLT](#), [Computers & Education](#), [Systems & Software](#).
- since 2015 **Reviewing for Workshops and Symposia**, [BIAS](#), [IronGraphs](#), [MURS](#), [PsyIAS](#), [HAAPIE](#), [MORS](#), [INTRS](#), [Perspectives](#), [RDSM](#), [SOAPS](#), [AFEL](#), [SNAMS](#), [MSM](#).
- since 2014 **Reviewing for Conferences**, [SIGIR](#), [ECAI](#), [ECIR](#), [ICWE](#), [CIKM](#), [WWW](#), [IUI](#), [HT](#), [EuroCSS](#), [RecSys](#), [WebSci](#), [OpenSym](#), [UMAP](#), [ECTEL](#).

International Research Projects Participated

- 2025–2027 **HorizonEurope**, *Linked User-driven Multidisciplinary Exploration Network (LUMEN)*, Led by CNRS, Role: key researcher.
- 2024–2026 **HorizonEurope**, *Enhancing Trust, Integrity and Efficiency in Research through next-level Reproducibility (TIER-2)*, Led by Know Center Research GmbH, Role: key researcher.
- 2024–2025 **FFG BASIS**, *Prognosen von Ressourcenbedarfen (Pro'K'ress)*, Led by DaphOS, Role: key researcher for privacy-preserving machine learning and recommender systems.
- 2024–2025 **OpenWebSearch Third-Party Call**, *Trustworthy Access to Knowledge from the Indexed Web (TILDE)*, Led by University of Passau, Role: key researcher.
- 2024–2025 **FFG AI4Green**, *Strategic AI Roadmap for Mobility (SAIROM)*, Led by University of Graz, Role: key researcher.
- 2024–2025 **Styrian AI Future Fund**, *FairRecSys*, Led by TU Graz, Role: co-PI.
- 2023–2026 **FFG COMET Research Center**, *Know Center - Research Center for Trustworthy AI*, Led by Know Center Research GmbH, COMET-funded research projects conducted with e.g., SGS, Role: research area manager for FAIR-AI.
- 2022–2026 **FFG COMET Module**, *Data-Driven Immersive Analytics (DDIA)*, Led by Know Center Research GmbH, research conducted with partners, e.g., University of Stuttgart, Role: key researcher for subproject on recommendations and LLMs.
- 2022–2025 **FFG FemTech**, *Radreisen4All*, Led by Cyclebee, Role: key researcher.
- 2020–2023 **FFG COMET Module**, *Data-Driven Artificial Intelligence (DDAI)*, Led by Know Center Research GmbH, research conducted with partners, e.g., TU Delft, Role: key researcher for subproject on explainable and private AI for users.
- 2020–2023 **Erasmus+**, *Cogsteps*, Led by University of Zagreb, Role: key researcher.
- 2020–2022 **Horizon2020**, *Trusted Secure Data Sharing Space (TRUSTS)*, Led by Leibniz University Hannover, Role: task lead.
- 2020–2022 **Horizon2020**, *TRIPLE*, Led by CNRS, Role: co-task lead.
- 2020–2022 **Horizon2020**, *AI4EU*, Led by Thales SIX GTS France SAS, Role: co-task lead.
- 2019–2022 **FFG COMET Research Center**, *Know Center - Research Center for Big Data Analytics*, Led by Know Center Research GmbH, COMET-funded research projects conducted with e.g., DiePresse, Role: deputy research area manager for Social Computing.
- 2019–2021 **FFG BASIS**, *Automated Marketing and Loyalty System for Retailers and Stores (Joloo)*, Led by Joloo GmbH, Role: researcher for recommender systems.
- 2018–2020 **FFG BASIS**, *Studo App Sales Offensive*, Led by Moshbit GmbH, Role: researcher.
- 2018–2020 **Styrian Health Fund**, *Health-Literacy und Diversity (HeLi-D)*, Led by University of Graz, Role: work package lead.
- 2018–2020 **OpenAIRE Tender Call**, *OpenAIRE Matchmaker*, Led by OpenAire, Role: researcher.
- 2015–2018 **Horizon2020**, *Analytics for Everyday Learning (AFEL)*, Led by University of Galway, Role: co-task lead.
- 2015–2018 **Horizon2020**, *MoreGrasp*, Led by TU Graz, Role: researcher for recommender systems.
- 2015–2018 **FFG Lighthouse**, *Data Market Austria (DMA)*, Led by Research Studios Austria, Role: researcher for recommender systems.
- 2012–2016 **FP7**, *Learning Layers*, Led by Tallinn University, Role: Ph.D. candidate.
- 2012–2014 **FP7**, *Organic Lingua*, Led by University of Alcalá, Role: researcher.
- 2010–2012 **FP7**, *ALICE*, Led by University of Milano-Bicocca, Role: researcher.

Priv.-Doz. Dr. Dominik Kowald

List of Publications (* indicates equal contributions)

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Monographs

- [1] Dominik Kowald. Transparency, privacy, and fairness in recommender systems. *arXiv preprint arXiv:2406.11323 (habilitation at Graz University of Technology)*, 2024. URL <https://doi.org/10.48550/arXiv.2406.11323>.
- [2] Dominik Kowald. *Modeling activation processes in human memory for tag recommendations*. Suedwestdeutscher Verlag fuer Hochschulschriften, 2017. URL <https://www.morebooks.shop/shop-ui/shop/product/978-620-2-32072-6>.
- [3] Dominik Kowald. Modeling activation processes in human memory to improve tag recommendations. *arXiv preprint arXiv:1803.03176 (Ph.D. thesis at Graz University of Technology)*, 2017. URL <https://doi.org/10.48550/arXiv.1803.03176>.

Journal Articles

- [4] Harald Semmelrock, Tony Ross-Hellauer, Simone Kopeinik, Dieter Theiler, Armin Haberl, Stefan Thalmann, and Dominik Kowald. Reproducibility in machine learning-based research: Overview, barriers and drivers. *Accepted for publication in the AI Magazine, arXiv preprint arXiv:2406.14325*, 2025. URL <https://doi.org/10.48550/arXiv.2406.14325>.
- [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] Dominik Kowald, Sebastian Scher, Viktoria Pammer-Schindler, Peter Müllner, Kerstin Waxnegger, Lea Demelius, Angela Fessl, Maximilian Toller, Inti Gabriel Mendoza Estrada, Ilija Simic, Vedran Sabol, Andrea Truegler, Eduardo Veas, Roman Kern, Tomislav Nad, and Simone Kopeinik. Establishing and evaluating trustworthy AI: Overview and research challenges. *Frontiers in Big Data, Research Topic on Towards Fair AI for Trustworthy Artificial Intelligence*, 2024. URL <https://doi.org/10.3389/fdata.2024.1467222>.
- [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] 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>.
- [9] 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>.

- [10] 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>.
- [11] 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>.
- [12] 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>.
- [13] 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/10.1561/15000000090>.
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