



# LWDA 2023

(Lernen, Wissen, Daten, Analysen)

Oktober, 09-11, 2023  
Marburg

# Program

time	Monday				
	KDML	FGDB	FGWM	FGIR	BIA
13:30 to 14:00	<b>Welcome</b>				
14:00 to 15:00	<b>Keynote (Room +3/0050, 3rd floor)</b> <b>Prof. Dr. Hannes Mühleisen</b> (Co-Founder and CEO at DuckDB Labs): <i>Two Tier Architectures are Anachronistic - In-Process Analytical Data Management with DuckDB</i>				
15:00	<b>Coffee break (Room +2/0050, 2nd floor)</b>				
15:30 to 17:30	<b>Joint Research Session (Room +3/0050, 3rd floor)</b>  <b>KDML – S. Hachmeier and R. Jäschke:</b> Cover Song Identification in Practice with Multimodal Co-Training  <b>WM – A. Korger and J. Baumeister:</b> Case-Based Sample Generation using Multi-Armed Bandits  <b>KDML – J. Omeljanenko, A. Zehe, A. Hotho and D. Schlör:</b> CapsKG: Enabling Continual Knowledge Integration in Language Models for Automatic Knowledge Graph Completion  <b>IR – J. Weidmann, L. Dumani and R. Schenkel:</b> CLEARNESS: Coreference Resolution for Generating and Ranking Arguments Extracted from Debate Portals for Queries				
17:30 to 18:30	<b>free time</b>  this timeframe is blocked for your hotel check-ins; in the meanwhile, the poster session is set up				
18:30 to 20:00	<b>Poster Session (Room +2/0050, 2nd floor)</b>				

time	Tuesday				
	KDML	FGDB	FGWM	FGIR	BIA
09:00 to 10:00	<p><b>Keynote (Room +3/0050, 3rd floor)</b></p> <p>Prof. Dr. Erhard Rahm (University of Leipzig): <i>Data integration for Knowledge Graphs</i></p>				
10:00	<b>Coffee Break (Room +2/0050, 2nd floor)</b>				
10:30 to 12:00	<p><b>KDML1 (Room +3/0050, 3rd floor)</b></p> <p>T. Koopmann, J. Pfister, A. Markus, A. Carolus, C. Wienrich and A. Hotho: Higher-Order DeepTrails: Unified Approach to *Trails</p> <p>L. Lensen, N. Strahmann and E. Schubert: Fast k-Nearest-Neighbor-Consistent Clustering</p> <p>A. Schliebitz, H. Tapken and M. Atzmueller: Preprocessing Ground-Based Hyperspectral Image Data for Improving CNN-based Classification</p> <p>P. Haritz and T. Liebig: Free-Energy Advantage Functions for Policy Transfer to Noisy Environments with Safety Constraints <b>[canceled]</b></p> <p>A. Saadallah and M. Jakob: Online Deep Hybrid Ensemble Learning for Time Series Forecasting</p> <p>M. Bunse and L. Pfahler: Class-Conditional Label Noise in Astroparticle Physics</p>	<p><b>DB 1 (Room +1/0010, 1st floor)</b></p> <p>M. Poppinga, J. Graef, K. Diedrich, M. Rarey and N. Ritter: Database and Workflow Optimizations for Spatial-Geometric Queries in GeoMine</p> <p>M. Langohr, T. Vogler and K. Meyer-Wegener: SKYSHARK: A Benchmark with Real-world Data for Line-rate Stream Processing with FPGAs</p> <p>C. Wangmo and L. Wiese: SuMExplorer: Summarisation-based Frequent Subgraph Mining for Visual Exploratory Subgraph Searching</p> <p><b>Session Chair:</b> Ralf Schenkel</p>	<p><b>WM 1 (Room +3/0010, 3rd floor)</b></p> <p>V. Eisenstadt, J. Bielski, C. Langenhan, K. D. Althoff and A. Dengel: A Feature-wise Comparative Assessment of the CBR-based Methodologies FLEA and SEASALT</p> <p>M. Nadeem, J. Zenkert, L. Bender, C. Weber and M. Fathi: KIRETT: Knowledge-Graph-Based Smart Treatment Assistant for Intelligent Rescue Operations</p> <p>J. Baumeister and V. Roß: SKOS-Utills: Developing and Checking SKOS Knowledge Graphs (Tool Presentation)</p> <p><b>Session Chair:</b> Jakob Schönborn</p>	<p><b>IR 1 (Room +1/0050, 1st floor)</b></p> <p>M. Fröbe, J. H. Reimer, S. MacAvaney, N. Deckers, S. Reich, J. Bevendorff, B. Stein, M. Hagen and M. Potthast: The Information Retrieval Experiment Platform</p> <p>S. Diem and T. Mandl: Automatic Classification of Portraits: Application of Transformer and CNN Based Models for an Art Historic Dataset</p> <p>L. Martin and A. Henrich: A Testbed for Dual-Entity Knowledge Panels</p> <p>T. Hirmer, M. Ochs and A. Henrich: Vertical Search Scenarios within a Digital Study Planning Assistant</p> <p><b>Session Chair:</b> Andreas Henrich</p>	<b>BIA 1</b>
12:00 to 13:00	<b>Lunch (Room +2/0050, 2nd floor)</b>				

13:00 to 14:30	<p><b>Joint Research Session 2 (Room +3/0050, 3rd floor)</b></p> <p><b>KDML – A. Beer, A. Draganov, E. Hohma, P. Jahn, C. M.M. Frey and I. Assent:</b> Connecting the Dots — Density-Connectivity Distance unifies DBSCAN, k-Center and Spectral Clustering</p> <p><b>DB – C. Großmann and J. Schildgen:</b> Integrating Machine Learning into SQL with Exasol</p> <p><b>BIA – M. Holtkemper, M. Potanin, A. Oberst and C. Beecks:</b> Risk Identification of Data Science Projects: A Literature Review</p>
14:30 to 15:30	<b>Panel Discussion (Room +3/0050, 3rd floor)</b>
15:30	<b>Coffee Break (Room +2/0050, 2nd floor)</b>
16:00 to 17:00	<p><b>Community Meetings</b></p> <p>(<b>KDML:</b> Room +3/0050, 3rd floor; <b>DB:</b> Room +1/0010, 1st floor; <b>WM:</b> Room +3/0010; <b>IR:</b> Room +1/0050, 1st floor; <b>BIA:</b> Room +2/0050, 2nd floor)</p>
17:30 to 20:00	<p><b>Social Event – Marburg by night</b></p> <p>City Tour through Marburg, meeting is at 17:30 at the fountain on the market square. Followed by a self organised dinner.</p>

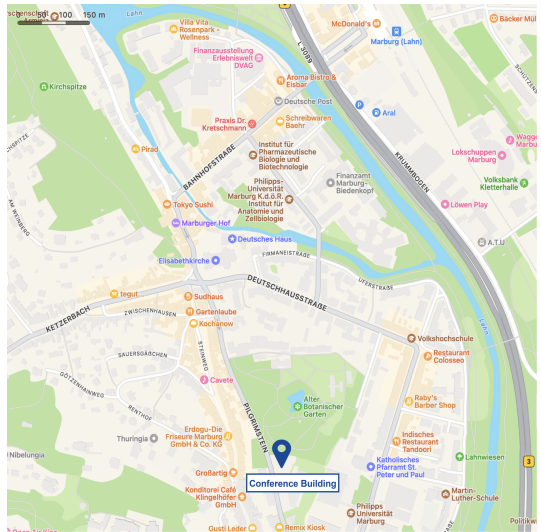
time	Wednesday				
	KDML	DB	WM	IR	BIA
09:00 to 10:00	<p><b>Keynote (Room +3/0050, 3rd floor)</b></p> <p><b>Prof. Dr. Michael Granitzer</b> (University of Passau): OpenWebSearch.eu - Building an Open Web Index for an open web search ecosystem</p> <p><b>Moderation:</b> Christin Seifert</p>				
10:00	<b>Coffee Break</b>				

<p>10:30 to 12:00</p>	<p><b>KDML 2</b> (Room +3/0050, 3rd floor)</p> <p><b>P. Janetzky, P. Lissmann, A. Hotho and A. Krause:</b> Automatic Speech Detection on a Smart Beehive's Raspberry Pi</p> <p><b>J. Hanselle, J. Kornowicz, S. Heid, K. Thommes and E. Hüllermeier:</b> Comparing Humans and Algorithms in Feature Ranking: A Case-Study in the Medical Domain</p> <p><b>F. Barth, L. Weber-Genzel and U. Leser:</b> Biomedical Event Extraction with Generative Language Models</p> <p><b>M. Schaller, M. Steining, A. Dulny, D. Schlör and A. Hotho:</b> Liquor-HGNN: A heterogeneous graph neural network for leakage detection in water distribution networks</p> <p><b>B. Böing, S. Klüttermann and E. Müller:</b> Post-Robustifying Deep Anomaly Detection Ensembles by Model Selection</p> <p><b>B. Tödtli, S. Müller, M. Rickenmann, J. Vetsch and S. Haug:</b> A Document Tagging Support System for Nursing Care Experts</p>	<p><b>DB 2</b> (Room +1/0010, 1st floor)</p> <p><b>A. Grünhagen, M. Schütte, A. Eichler, M. Tropmann-Frick and G. Fey:</b> Enhancing Data Acquisition and Fault Analysis for Large-Scale Facilities: A Case Study on the Laser-Based Synchronization System at the European X-Ray Free-Electron Laser</p> <p><b>M. L. Möller, D. Hausler, S. Strasser, T. Auge and M. Klettke:</b> Heterogeneity in NoSQL Databases: Challenges of Handling schema-less Data</p> <p><b>S. Langenecker, C. Sturm, C. Schalles and C. Binnig:</b> Pythagoras: Semantic Type Detection of Numerical Data Using Graph Neural Networks</p> <p><b>M. Li, W. Galetzka, B. Eryilmaz, G. C. Lodde, E. Livingstone, J. Schlötterer and C. Seifert:</b> Patient trajectory visualization for FHIR healthcare data: A use case on melanoma patients</p> <p><b>Session Chair:</b> Maximilian Schüle</p>	<p><b>WM 2</b> (Room +3/0010, 3rd floor)</p> <p><b>A. Lommatzsch, B. O. L. Kurps, S. A. M. Tahir, V. S. Rosenberger, M. N. Walny and H. D. Boyadzhiev:</b> Combining an Information Retrieval and Large Language Models for a Chatbot that Generates Reliable, natural-style Answers</p> <p><b>T. Alby:</b> The Data Dilemma: Google Analytics' Untapped Potential and Web Data Literacy</p> <p><b>W. Müller and M. Leyer:</b> Bridging the Gap: Examining the trust dimensions of smart contracts using supply chain applications</p> <p><b>Session Chair:</b> Johannes Baumeister</p>	<p><b>IR2</b> (Room +1/0050, 1st floor)</p> <p><b>M. Bertram, J. Schäfer and T. Mandl:</b> Hate Speech Collections for German and their Features</p> <p><b>P. Schaer, S. Myshkina and J. Keller:</b> Scientometric Analysis of German IR Researchers between 2020 and 2023</p> <p><b>M. Bullin and A. Henrich:</b> Applied Face Recognition in the Humanities</p> <p><b>Session Chair:</b> Ralf Schenkel</p>	<p><b>BIA2</b> (Room 00/0130, gr. floor)</p> <p><b>T. C. Schelhorn, J. Gunklach and A. Mädche:</b> Designing an Analytical Control Chart System with ML-predicted Quality Characteristics</p> <p><b>B. Augenstein and D. Salaj:</b> Exploiting Foundation Models for Spoken Language Identification</p> <p><b>P. Herbst and H. Baars:</b> Accelerating literature screening for systematic literature reviews with Large Language Models – development, application, and a first evaluation</p>
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12:00 to 13:00	<b>Lunch</b>				
13:00 to 14:30	<p><b>KDML3 (Room +3/0050, 3rd floor)</b></p> <p><b>S. Mücke and T. Gerlach:</b> Efficient Light Source Placement using Quantum Computing</p> <p><b>J. Brandt, E. Schede, S. Sharma, V. Bengs, E. Huellermeier and K. Tierney:</b> Contextual Pre-selection Methods in Pool-based Realtime Algorithm Configuration</p> <p><b>F. Siepe, P. Wenig and T. Papenbrock:</b> A Few Models to Rule Them All: Aggregating Machine Learning Models</p> <p><b>S. Müller, V. Toborek, K. Beckh, M. Jakobs, C. Bauckhage and P. Welke:</b> An Empirical Evaluation of the Rashomon Effect in Explainable Machine Learning</p> <p><b>J. Tritscher, M. Wolf, A. Hotho and D. Schlör:</b> Evaluating feature relevance XAI in network intrusion detection</p> <p><b>V. Toborek, M. Busch, M. Boßert, C. Bauckhage and P. Welke:</b> A New Aligned Simple German Corpus</p>	<p><b>DB3</b></p> <p>/</p>	<p><b>WM3 (Room +3/0010, 3rd floor)</b></p> <p><b>M. Mauri, Ö. I. Erduran, M. Minor and T. P. D. An:</b> Integrating BDI Agents with the MATSim Traffic Simulation for Autonomous Mobility on Demand</p> <p><b>M. Krüger:</b> Comparative Analysis of Text-Based CBR Algorithms for Cybercrime Profiling Investigations</p> <p><b>Session Chair:</b> Pascal Reuss</p>	<p><b>IR3</b></p> <p>/</p>	<p><b>BIA3 (Room 00/0130, gr. floor)</b></p> <p><b>M. Werling, P. Weber and H. Lasi:</b> Datengenossenschaften als Datentreuhänder – Eine qualitative Analyse von Pilotprojekten</p> <p><b>J. Lachenmaier, M. Werling and D. Morar:</b> Governance of Artificial Intelligence – A Framework Towards Ethical AI Applications</p>
14:30 to 15:30	<p><b>Keynote (Room +3/0050, 3rd floor)</b></p> <p><b>Dr. Dietrich Alexander Herberg:</b> The crucial last mile: mastering the art of successful implementation</p>				
15:30 to 16:00	<b>Closing</b>				

## Location & Room Plan

The LWDA - conference takes place at the **Campus Firmani** of the University of Marburg (Pilgrimstein 12). The conference rooms are located on different levels of the building. Room +1/0010 and room +1/0050 are on the 1<sup>st</sup> floor, room +2/0050 is on the 2<sup>nd</sup> floor and room +3/0050 and room +3/0010 are on the 3<sup>rd</sup> floor. The cloakroom is situated on the ground floor in room 0/0100. You can find a detailed plan of the rooms on each level of the building next to the stairs.



## Social Event – Marburg by night

The social event will be a city tour through the city of Marburg. Meeting for the tour will be on Tuesday, at 17:30 at the fountain on the market square (**Address: Markt 12, 35037 Marburg**). The walk from the conference to the meeting point will be around 10 minutes.



## Restaurants in Marburg

For the self-organised dinner after the city tour, we would like to provide you with a short list of popular restaurants.

### **Restaurant Ratsschänke**

Markt 3, 35037 Marburg

*Traditional german*

### **5 Jahreszeiten**

Reitgasse 5, 35037 Marburg

*European*

### **957 Ramen Bar**

Krebsgasse 1, 35037 Marburg

*Japanese*

### **Market**

Markt 11, 35037 Marburg

*Traditional german, European*

### **Edlunds**

Markt 15, 35037 Marburg

*European, Swedish*

### **Bistro Early**

Wettergasse 14, 35037 Marburg

*Italian, German*

### **Restaurant Mon Ami**

Universitätsstraße 28, 35037 Marburg

*Mediterranean, Italian*

### **Paprica Marburg**

Reitgasse 12, 35037 Marburg

*European*

## Feel free to return your conference bag & name badge

We want to keep LWDA2023 as sustainable as possible. Therefore, if you have no further use for your name badge, conference bag and/or its contents after the conference, please feel free to return it to us!