

Program Structure
DEXA Conferences & Workshops 2026
 11 - 13 August 2026 - University of Graz, Main Building
 Address: Universitätsplatz 3, Graz, Austria

DAY 1, Tuesday, 11 August 2026

Time			
08:00 – 09:00	Registration		
09:00 – 09:15	Plenary - Aula room, 1st fl. Opening <i>DEXA Conferences & Workshops - Steering Committees & PC Chairs</i>		
09:15 – 10:00 45"	Plenary - Aula room, 1st fl. Keynote "The New Scarcity: Human Judgment in a World of AI-Generated Content" Edgar Weippl, University of Vienna, Austria		
10:00 – 10:30 30"	Coffee break		
	Track 1 Room: SZ01.18, 1 st fl.	Track 2 Room: HS01.15, 1st fl.	Track 3 Room: HS01.14, 1 st fl.
10:30 – 12:30 120"	D1.1.1	D1.2.1	D1.3.1
	EGOVIS - 1 3+3 papers	DEXA - 1 5 papers	DAWAK - 1 5 papers
	Legal Aspects and Challenges & E-Government Cases	Large Language Models and Multi- Agent Systems (1)	Responsible AI & Learning (1)
	Paper ID#: 19,24,22,16,21,25	Paper ID#: 18,111,159,107,35	Paper ID#: 2,8,32,14,61
12:30 – 13:30 60"	Lunch break		
13:30 – 15:00 90"	D1.1.2	D1.2.2	D1.3.2
	DEXA – 2 4 papers	DEXA – 3 4 papers	DAWAK - 2 4 papers
	Knowledge Graphs and Graph Intelligence	Recommendation, Search and Information Retrieval	Time Series & Machine Learning (1)
	Paper ID#: 46,75,85,9	Paper ID#: 11,76,39,37	Paper ID#: 46,28,30,58
15:00 – 15:30 30"	Coffee break		
15:30 – 17:00 90"	D1.1.3	D1.2.3	D1.3.3
	DEXA – 4 5 papers	DEXA – 5 4 papers	WORKSHOPS - 1 6 papers
	Storage Systems and Data Infrastructure & Large Language Models and Multi- Agent Systems (2)	Machine Learning Foundations and Data Generation	AI Sys
	Paper ID#: 44,58,3,33, 106	Paper ID#: 90,36,43,26	Paper ID#: AIS_3,AIS_5,AIS_8,AIS_9,AIS_10,AIS_11
18:00 – 20:00	Welcome Reception @University of Graz, Main Building, Inner Courtyard		

DAY 2, Wednesday, 12 August 2026

Time	Track 1 Room: SZ01.18, 1 st fl.	Track 2 Room: HS01.15, 1 st fl.	Track 3 Room: HS01.14, 1 st fl.
08:00 – 09:00	Registration		
09:00 – 09:45 45"	Plenary - Aula room, 1st fl. Invited Talk Community Mining and Community Search: Beyond Social Network Analysis Osmar Zaiane, University of Alberta, Canada		
09:45 – 10:30 45"	Plenary - Aula room, 1st fl. Invited Talk Phishing Attacks and the Paradox of Privacy in Data-Driven Digital Ecosystems Anne Kayem, University of Exeter, UK		
10:30 – 11:00 30"	Coffee break		
11:00 – 12:30 90"	D2.1.1	D2.2.1	D2.3.1
	EGOVIS - 2 3 papers	DEXA - 6 4 papers	DAWAK - 3 4 papers
	Digital Transformation and E-government Adoption	Systems, Security and Emerging Applications (1)	Data Integration & Quality (1)
	Paper ID#: 7,2,3	Paper ID#: 70,88,113,20	Paper ID#: 34,52,31,55
12:30 – 13:30 60"	Lunch		
13:30 – 15:00 90"	D2.1.2	D2.2.2	D2.3.2
	EGOVIS - 3 3 papers	DEXA - 7 5 papers	WORKSHOPS - 2 4 papers
	AI in E-Government	Database Systems and Query Processing & Neural Networks and Applied AI (1)	AI4IP 1
	Paper ID#: 14,11,12	Paper ID#: 95,69,92,74,77	Paper ID#: AIP_10,AIP_11,AIP_12,AIP_13
15:00 – 15:30 30"	Coffee break		
15:30 – 17:00 90"	D2.1.3	D2.2.3	D2.3.3
	DEXA - 8 5 papers	DEXA - 9 4 papers	DAWAK - 4 4 papers
	Graph Data Management and Processing	Temporal Data Analytics and Forecasting (1) Storage Systems and Data Infrastructure (2)	Data Lakes & Lakehouses (1)
	Paper ID#: 17,21,108,19,41	Paper ID#: 2,116,47,101	Paper ID#: 12,13,44,18
19:00 – 22:00	Conference Dinner and Best Paper Award announcement @ Gösser Bräu Graz Address: Neutorgasse 48, Graz - [https://www.goesserbraeugraz.at/]		

DAY 3, Thursday, 13 August 2026

Time	Track 1 Room: HS01.15, 1 st fl.	Track 2 Room: SZ01.18, 1 st fl.	Track 3 Room: HS01.14, 1 st fl.
08:00 – 09:00	Registration		
09:00 – 10:30 90"	D3.1.1	D3.2.1	D3.3.1
	EGOVIS - 4 3 papers	DEXA - 10 4 papers	DAWAK - 5 4 papers
	E-Government Architecture and Security Issues	AI for IoT and Cybersecurity	Time Series & Machine Learning (2) Data Integration & Quality (2)
	Paper ID#: 23,5,8	Paper ID#: 60,84,8,81	Paper ID#: 62,45,6,22
10:30 – 11:00 30"	Coffee break		
11:00 – 12:30 90"	D3.1.2	D3.2.2	D3.3.2
	DEXA - 11 4 papers	DEXA - 12 4 papers	DAWAK - 6 4 papers
	Data Governance, Quality and Integration	Temporal Data Analytics and Forecasting (2) Machine Learning Foundations and Data Generation (2) Systems, Security and Emerging Applications (2)	Database & Graph Systems (1)
	Paper ID#: 30,7,96,62	Paper ID#: 115,110,6,91	Paper ID#: 33,40,24,43
12:30 – 13:30 60"	Lunch		
13:30 – 15:00 90"	D3.1.3	D3.2.3	D3.3.3
	DEXA - 13 3 papers	WORKSHOPS - 3 4 papers	DAWAK - 7 3 papers
	Neural Networks and Applied AI (2)	AI4IP 2	Database & Graph Systems (2) Responsible AI & Learning (2) Data Lakes & Lakehouses (2)
	Paper ID#: 72,31,48	Paper ID#: AIP_14,AIP_15,AIP_16,AIP_17	Paper ID#: 56,25,50
15:00 – 15:30	Closing and Coffee Break		

DAY 1, Tuesday, 11 August 2026

Time	Agenda	Room
08:00 - 09:00	Registration	Aula Foyer, 1 st fl.
09:00 - 09:15	Opening - DEXA Conferences & Workshops, Steering Committees & PC Chairs	Aula room, 1 st fl.
09:15 - 10:00	Keynote Talk <i>Session chair: Gabriele Kotsis</i> The New Scarcity: Human Judgment in a World of AI-Generated Content Edgar Weippl , University of Vienna Austria	Aula room, 1 st fl.
10:00 - 10:30	Coffee Break	Foyer, 1 st fl.
10:30 - 12:30	EGOVIS - 1 - Legal Aspects and Challenges - E-Government Cases <i>Session chair: Monica Palmirani</i> • Explainability, Standardisation, and the AI Act <i>Salvatore Sapienza, Monica Palmirani</i> Italy • Connecting Recitals and Normative Provisions in European Legislation using Transforme <i>Monica Palmirani, Michele Corazza, Generoso Longo, Salvatore Sapienza</i> Italy • Making Copyright Law Computable: Rule-Based Text Extraction for WIPO Compliance Checking <i>John F. Brüne, Michele Corazza, Monica Palmirani</i> Italy • Fact-Grounded Explainable Analytics for Rural Governance <i>Aleksei Karetnikov, Jorge Martinez-Gil, Marton Magyar, Ossi Kotavaara, Gianluca Lentini</i> Austria • Predicting Disagreement: Automated Detection of Party Position Divergence in Voting Advice Applications Using NLP <i>Thilo I. Dieing</i> Germany • Governing GenAI Under Data Sovereignty Constraints <i>Gideon Mekonnen Jonathan, Erik Perjons</i> Sweeden	Track: 1 Room: SZ01.18, 1st fl.
10:30 - 12:30	DEXA - 1 Large Language Models and Multi-Agent Systems (1) <i>Session chair: TBA</i> • Centralized Task Planning and Dynamic Device Collaboration in LLM-based Multi-Agent Smart Home Systems <i>Zeyi Sun, Jinghua Groppe, Sven Groppe</i> Germany • On the Reliability of Open-Weight Language Models for Relational Data Generation under Structural Constraints <i>Saba Zamankhani, Kai Uwe Sattler</i> Germany • Towards Efficient Quantity Retrieval from Text: An Approach via Description Parsing and Weak Supervision <i>Yixuan Cao, Zhengrong Chen, Chengxuan Xia, Kun Wu, Ping Luo</i> China	Track: 2 Room: HS01.15, 1st fl.

- Lightweight Strategies to Mitigate Small VideoLLM's challenges in Video Summarization
Lorenzo Vaiani, Luca Cagliero, Wiktor Woronko
Italy
- A Multi-Agent AI System for Automated Patent Deep Research and Analysis
Mustafa Sofean and Hidir Aras
Germany

10:30 - 12:30 **DAWAK - 1** **Track: 3**

Responsible AI & Learning (1)

Room: HS01.14, 1st fl.

Session chair: Carson Leung

- BALM: Bias-Aware Generation for Large Language Models
Dorleon Ginel, Shirin Shujaa
Vietnam
- FAIRTOPIA: A Multi-Agent Guardianship Framework for Disrupting Unfair AI Pipelines
Athena Vakali, Ilias Dimitriadis, Sofia Vei
Greece
- ACAT: A Collaborative Platform for Efficient Aspect-Based Sentiment Dataset Annotation
Ana-Maria Luisa Mocanu, Ciprian-Octavian Truică, Elena-Simona Apostol
Romania
- Q-Matrix Learning Based on Graph Attention Neural Network for Knowledge Tracing
Wei Su, Lei Liu, Chuan Cai, Luna Zhang, Yongna Yuan, Shenglin Xu
China
- Q-dEclat: A Vertical Quantitative Frequent Pattern Mining Algorithm
Carson Leung, Adam G.M. Pazdor
Canada

12:30 - 13:30 Lunch Aula Foyer, 1st fl.

13:30 - 15:00 **DEXA - 2** **Track: 1**

Knowledge Graphs and Graph Intelligence

Room: SZ01.18, 1st fl.

Session chair: TBA

- Adaptive Structural Modality Enhancement in Score Calculation for Knowledge Graph Completion
junhui Deng, yingshan Shen, weizhong Zhang, guanxin Hou, shuqi Chen
China
- Knowledge Graph Adapter-Based Augmentation Testbed for Large Language Models
Ushtar Ali, Steven Lynden, Akiyoshi Matono, Toshiyuki Amagasa
Japan
- Evidence-Supported Credit Risk Report Generation Using News-Centric Financial Knowledge Graph
Rocío Jiménez-Villén, Ziwei Xu, Ying Chen, Oscar Araque, Ryutaro Ichise
Spain, Japan
- Fair Link Prediction in Social Network with Intersectional Sensitive Attributes
Lei Wang, Yifeng Peng, Yan Zhu, Yiqiang Peng
China

13:30 - 15:00 **DEXA - 3** **Track: 2**

Recommendation, Search and Information Retrieval

Room: HS01.15, 1st fl.

Session chair: TBA

- MIRAGE: Multi-Intent Reasoning and Adaptive Graph Embedding for Recommendation
Baofeng Ren, Tianyuan Yang, Chenghao Gu, Boxuan Ma, Shin'ichi Konomi
Japan

- POI Recommendation with Multi-Granular Weather Information
Koki Mitta, Qiang Ma
Japan
- Beyond the Window: Scaling Listwise LLM Reranking via Candidate Filtering
Louis Remy, Sandra Bringay, Pascal Poncelet, Maximilien Servajean
France
- PIPER: Content-Based Table Search via profiling and LLM-Generated Pseudoqueries
Riccardo Terrenzi, Matteo Falconi, Serkan Ayvaz, Pierluigi Plebani
Denmark, Italy

13:30 - 15:00

DAWAK - 2

Track: 3

Time Series & Machine Learning (1)

Room: HS01.14, 1st fl.Session chair: *Vincent Lemaire*

- MoE-TFT: Mixture-of-Experts Enhanced Temporal Fusion Transformer for Time Series Forecasting
Saifullah Burero, Anton Dignoes, Michele Linardi, Johann Gamper
Italy, France
- CODA: A Coordinate-Driven Autoencoder for Robust Multivariate Time Series Anomaly Detection
Pierre Lotte, Andre Peninou, Olivier Teste
France
- Topologically-Constrained Any-Variate Time-Series Foundation Models for Twinning of Continuous Industrial Processes
Michael Mayr, Georgios C. Chasparis
Austria
- ConvTransAKD: Multi-Level Wasserstein Alignment for Efficient Knowledge Distillation in Sensor-Based Activity Recognition
Thi Hong Vuong, Tung Doan, Atsuhiko Takasu
Vietnam, Japan

15:00 - 15:30

Coffee Break

Foyer, 1st fl.

15:30 - 17:00

DEXA - 4

Track: 1

- Storage Systems and Data Infrastructure (1)

Room: SZ01.18, 1st fl.

- Large Language Models and Multi-Agent Systems (2)

Session chair: *TBA*

- HABU: Efficient Asynchronous and Bulk Updates for Online ANN Search
Misato Horiuchi, Yuya Watari, Takeshi Yamamuro
Japan
- Improving IO Efficiency for Storage-scale Approximate Nearest Neighbor Search
Guoxing Wu, Tsuyoshi Ozawa, Yuto Hayamizu, Kazuo Goda
Japan
- Adaptive Delay Fusion for Proactive Lag Control in Asynchronous Replication
Hiroki Takamatsu, Takeshi Yamamuro
Japan
- ST-MTSLM: A Device-Partitioned Multi-Tier LSM-Tree with Non-Blocking Snapshot Publication for Massive Spatio-Temporal IoT Data
Jianwen Yang, Qihong Zhang, Zhiming Ding, Shuo Zhang, Xinguo Chen, Chenxin, Jian Miao, Xueyu Gao
China
- KMAP: Knowledge-controllable Multi-Agent LLM Peer Learning
Kosei Nakazono, Qiang Ma
Japan

15:30 - 17:00 **DEXA - 5** **Track: 2**

Machine Learning Foundations and Data Generation (1)

Room: HS01.15, 1st fl.

Session chair: TBA

- Drift Adaptation as Supervision Routing under Heterogeneous Costs
Jorge Martinez-Gil, Florian Bachinger, Rudolf Ramler, Francois Picard, Leila Belmerhnia, Georgios Spathoulas
Austria, France, Norway
- Clustering-Guided Oversampling and Geometric Validation for Imbalanced Learning
Wan D. Bae, Shayma Alkobaisi, Ankita Kadam, Dharanipriya Ravindran, Rishi Munuswamy, Sada Narayanappa
USA, UAE
- A Label Selection Algorithm with Boolean Interpolative Matrix Decomposition for Multi-label Learning
Tianqi Ji, Jun Li, Jianhua Xu
China
- Counterfactual Generative Adversarial Network for Data Augmentation
Tianhui Li, Xuejun Liu, Feiyan Zhu
China

15:30 - 17:00 **WORKSHOP - 1** **Track: 3**

AI Sys Workshop

Room: HS01.14, 1st fl.

Session chair: Michael Mayr

- Physics-Informed Estimation of Behind-the-Meter PV Self-Consumption with Battery-Aware Monte Carlo Simulation
Marius Führer
Austria
- Visual Explanations for Segmenting Objects for Tunnel Monitoring from Few Samples
Helmut Neuschmied, Martin Winter, Werner Bailer, Georg Thallinger, Peter Steiner, Jan Pfeiffer, Michael Mett
Austria
- NExEM: Model-Agnostic Natural Language Explanation of Entity Matching
Hironori Mizuguchi, Hiroyuki Kitagawa
Japan
- Enhancing E-Commerce Product Data with AI at PBS Holding: Nearest Neighbor eClass Classification from Product Text Embeddings
Clara Schachner, Kyrylo Meliushko, Florian Kromp, Paria Huemer, Michael Schuch, Wolfgang Salm, Raphael Pisoni
Austria
- Scalable Federated Adaptation of Foundation Models using Flower on Kubernetes-based HPC Infrastructure: A Technical Report
Batuhan Bencik, Mathias Brucker, Mohit Kumar, Roman Rainer, Alexander Valentinitich
Austria
- Synthetic data for training and evaluation in industrial settings
Johannes Zellinger, Hrishikesh Gupta, Andreas Winkler, Christian Kohlberger, Clara Schachner, Florian Kromp
Austria

18:00 - 20:00 **Welcome Reception @Main Building Inner Courtyard**

DAY 2, Wednesday, 12 August 2026

Time	Agenda	Room
08:00 - 09:00	Registration	Aula Foyer, 1 st fl.
09:00 - 09:45	Invited Talk 1 <i>Session chair: TBA</i> Community Mining and Community Search: Beyond Social Network Analysis Osmar Zaiane <i>University of Alberta, Canada</i>	Aula Room 1 st fl.
09:45 - 10:30	Invited Talk 2 <i>Session chair: TBA</i> Phishing Attacks and the Paradox of Privacy in Data-Driven Digital Ecosystems Anne Kayem <i>University of Exeter, UK</i>	Aula Room 1 st fl.
10:30 - 11:00	Coffee Break	Foyer, 1 st fl.
11:00 - 12:30	EGOVIS - 2 Digital Transformation and E-government Adoption <i>Session chair: Andrea Kő</i> - Socioeconomic Factors on E-Government Adoption Behavior in a Developing Country <i>Gaffar Hafiz Sagala, Dóra Őri</i> <i>Hungary</i> - Digital Twins for Small Towns and Rural Regions: Data Integration, Simulation and Visualisation Across Three Use Cases in Lower Austria <i>Thomas Delissen, Lukas Daniel Klausner, Maximilian Lackner, Torsten Priebe, Lőrinc Thurnay</i> <i>Austria</i> - The Digital Maturity Paradox: A Comparative Analysis of e-Government Resilience Under Cyber Warfare <i>Gabriella Biró</i> <i>Hungary</i>	Track: 1 Room: SZ01.18, 1st fl.
11:00 - 12:30	DEXA - 6 Systems, Security and Emerging Applications (1) <i>Session chair: TBA</i> - Passwordless Authentication in the Face of AI and Quantum Computing Threats: A Review of Selected Methods and Threat Analysis <i>Mateusz Rzemieniewski, Izabela Rojek</i> <i>Poland</i> - An Energy-Aware Multi-Oracle Architecture Integrating Grid Feasibility Constraints for Peer-to-Peer Energy Trading <i>Waldsson Santos, André Araujo, Rendrikson Soares</i> <i>Brazil</i> - SMART-DAI: A Cloud/Edge Big Data Computing Platform for Supporting Multidimensional Big Data Analytics in Advanced Artificial Intelligence Applications <i>Alfredo Cuzzocrea</i> <i>Italy</i> - I/O Efficient Algorithms for Sparse Matrix Multiplication and Addition <i>Hashirul Quadir, Daniel Biediger, Carlos Ordonez</i> <i>USA</i>	Track: 2 Room: HS01.15, 1st fl.

11:00 - 12:30	DAWAK - 3	Track: 3
	- Data Integration & Quality (1)	Room: HS01.14, 1st fl.
	<i>Session chair: Osmar Zaiane</i>	
	• KAN-ER: Kolmogorov-Arnold Networks-based Entity Resolution in Data Lakes <i>Lamisse Bouabdelli, Fatma Abdelhedi, Slimane Hammoudi, Allel Hadjali</i> France • Leveraging Tattoo Description Classification in Historical Record Linkage <i>Eric Sartor, Jeremy Foxcroft, Luiza Antonie</i> Canada • ASOS-CRM: Automated Semantic Scoping for CIDOC CRM Population <i>Ali Hariri, Stéphane Jean, Mickaël Baron</i> France • Relational Database Data Lineage Ontology <i>Jakub Dutkiewicz, Pawel Misiorek, Robert Wrembel</i> Poland	
12:30 - 13:30	Lunch	Aula Foyer, 1 st fl.
13:30 - 15:00	EGOVIS - 3	Track: 1
	AI in E-Government	Room: SZ01.18, 1st fl.
	<i>Session chair: Thomas Delissen</i>	
	• When Generative AI Meets Bureaucracy: Organisational Frictions in Public Sector AI Adoption <i>Gideon Mekonnen Jonathan, Sileshi Demesie Yalew, Shengnan Han, Erik Perjons</i> Sweden • Determinants of Digital Adoption for AI-Driven Governance: Evidence from World Development Indicators <i>Sayyed Khawar Abbas, Tibor Kovács</i> Hungary • The AI Pace Gap: Anticipatory Governance and the Asymmetry of E-Government Transformation <i>Zakariya Belkhamza</i> Qatar	
13:30 - 15:00	DEXA - 7	Track: 2
	- Database Systems and Query Processing	Room: HS01.15, 1st fl.
	- Neural Networks and Applied AI (1)	
	<i>Session chair: TBA</i>	
	• A Workload-Driven Clustering-Based Schema Transformation Model for Relational to NoSQL Document Stores <i>Neha Bansal, Vikas Vikas, Preeti Mehta, Samridhi Singhal</i> India • Bloom Filter Trees for Efficient Evaluation of Conjunctive Queries in LSM Stores <i>Wojciech Macyna, Artur Trzesniewski, Carlos Ordonez</i> Poland, USA • Feasible Plan Generation with Ambiguity-Boundedness in Cross-Model Query Processing <i>Subhasis Dasgupta, Amarnath Gupta</i> USA • An Improved Representation for Temporal JSON <i>Bishal Sarkar, Curtis Dyreson</i> USA • Detecting Lost Hikers in Low Mountains by Multi-Granularity User Behavior Modeling <i>Yousuke Nakamura, Hidekazu Kasahara, Qiang Ma</i> Japan	

13:30 - 15:00	WORKSHOP - 2	Track: 3
	AI4IP Workshop (1)	Room: HS01.14, 1st fl.
	<i>Session chair: TBA</i>	
	- Simulation of a Drone-Suspended Pendulum System <i>Felix Wachter, Ulrich Göhner</i> Germany - Federated Learning for Multivariate Time Series Anomaly Detection in Industrial Automation <i>Khayyam Nosrati, Martin Uray, Saverio Messineo, Olaf Sassnick, Stefan Huber</i> Austria - Anticipatory Reinforcement Learning for Trajectory Tracking <i>Georg Schäfer, Jakob Rehrl, Stefan Huber, Simon Hirlaender</i> Austria - Integrating Physics-Informed Neural Networks for Safe Reinforcement Learning in a 1-DoF Helicopter System <i>Georg Schäfer, Jakob Rehrl, Stefan Huber</i> Austria	
15:00 - 15:30	Coffee Break	Foyer, 1 st fl.
15:30 - 17:00	DEXA - 8	Track: 1
	Graph Data Management and Processing	Room: SZ01.18, 1st fl.
	<i>Session chair: TBA</i>	
	- Evaluation of subgraph-querying from databases for mini-batch training Graph Neural Networks <i>Daniel Walke, Shweta Pandey, Gunter Saake, Alexander Jarasch, David Broneske, Robert Heyer</i> Germany - Exploring Topographic Data with Transitive Closure on Graphs <i>Adam Nelson-Archer, Christoph F. Eick, Carlos Ordonez</i> USA - Design Space of Iterative Graph Stream Processing on DAG Constrained Systems <i>Komal Mariam, Salman Ahmed Shaikh, Hiroyuki Kitagawa, Akiyoshi Matono</i> Japan - Inspecting Neural Networks with Queries <i>Dipta Chandra Paul, Hashirul Quadir, Nicholas Anderson, Carlos Ordonez</i> USA - Layered Evidence-Centric Graph Construction for Explainable Multi-hop Question Answering <i>Weiguo Zeng, Haoyang Xie, Zhenxuan Chao, Qiuxia Wu, Haoyu Liu, Siyu Li, Jianfeng Qu, Zhixu Li</i> China	
15:30 - 17:00	DEXA - 9	Track: 2
	- Temporal Data Analytics and Forecasting (1)	Room: HS01.15, 1st fl.
	- Storage Systems and Data Infrastructure (2)	
	<i>Session chair: TBA</i>	
	- Efficient Detection of Seasonal Bursts: Applications to Climate Time Series <i>Guillaume Coulaud, Audrey Brouillet, Reza Akbarinia, Florent Massegli, Dennis Shasha</i> France, Germany, USA - A Feature Engineering Pipeline for Non-Stationary Financial Time Series: A ZigZag-Based Approach to Forex Decision Support <i>Paweł Kierkosz, Paweł Kolec, Bartłomiej Rudowicz, Adam Nowacki, Dawid Wiśniewski</i> Poland - A Dual-Faceted Framework for Modeling Temporal Semantic Sequences <i>Hiba Merakchi, Cyril De Runz, Thomas Devogele, Veronika Peralta</i> France	

- Scalable Concurrency Control for R-Trees on Three-tier Storage with PMEM
Hiroataka Yoshioka, Kazuo Goda, Masaru Kitsuregawa
Japan

15:30 - 17:00 **DAWAK - 4** **Track: 3**

Data Lakes & Lakehouses (1)

Room: HS01.14, 1st fl.

Session chair: *Xiufeng Liu*

- Hybrid Table Annotation in Data Lakes
Nassima Kaid, Zoubida Kedad, Stephane Lopes
France
- Context-aware Data Quality Management in Data Lakes
José de León, Flavia Serra, Adriana Marotta
Uruguay
- Discovering Relationships in Data Lakes Using Large Language Models: An Industrial Case
Ahlame Diouan, Eric Ferey, Sabine Loudcher, Jerome Darmont
France
- LLM-Assisted Metadata Query Answering on Data Warehouses
Matteo Francia, Enrico Gallinucci, Matteo Golfarelli, Manuele Pasini, Stefano Rizzi
Italy

19:00 - 22:00 **Conference Dinner**

Dinner and Best Paper Award announcement

at **Gösser Bräu Graz**

address: Neutorgasse 48, Graz

[<https://www.goesserbraeugraz.at/>]

DAY 3, Thursday, 13 August 2026

<u>Time</u>	<u>Agenda</u>	<u>Room</u>
08:00 - 09:00	Registration	Aula Foyer, 1 st fl.

09:00 - 10:30 **EGOVIS - 4** **Track: 1**

E-Government Architecture and Security Issues

Room: SZ01.18, 1st fl.

Session chair: *Thomas Zefferer*

- Identity Matching in Cross-Border eGovernment: A Taxonomy of Challenges and Implications for the eIDAS2 Framework
Thomas Lenz, Thomas Zefferer
Austria
- Towards Flexible Embedded Disclosure Policies for EUDI Wallets
Jakob Heher, Christian Burtscher, Stefan More
Austria
- Security issues in the user environment arising from the switch to m-government - The case of Hungary
Gábor Klimkó, Péter József Kiss, Dóra Óri
Hungary

09:00 - 10:30 **DEXA - 10** **Track: 2**

AI for IoT and Cybersecurity

Room: HS01.15, 1st fl.

Session chair: *TBA*

- WassDRO-AD: Distributionally Robust Anomaly Detection for Multivariate IoT Data Streams
Xiufeng Liu, Ruyu Liu, Yanyan Yang
Denmark, UK

- Context-Aware Root Cause Identification in IoT Sensor Data via Semantic-Enhanced Anomaly Analysis
Nesrine Berjab
Japan
- Network Anomaly Detection through ILP-Based Symbolic Distillation of Autoencoder Models into Datalog Programs
Philipp Rösner, Stefan Brass, Sebastian Karius, Sandro Wefel
Germany
- XKG-IDS: Symbolic Graph Learning for Intrinsically Explainable IoT Intrusion Detection
Safa Ben Atitallah, Maha Driss, Wadii Boulila
Saudi Arabia

09:00 - 10:30 **DAWAK - 5** **Track: 3**

- Time Series & Machine Learning (2)

Room: HS01.14, 1st fl.

- Data Integration & Quality (2)

Session chair: Salmi Cheikh

- ANNOYing HDBSCAN for clustering
Ben M. Clark, Ginelle K. Elias, Carson K. Leung, Adam G.M. Pazdor, Thamira M. Randeniya, Xavier J. Schneider
Canada
- Evaluating Time-Dependent Risk Trajectories through Class–Cluster Alignment
Sergej Korlakov, Boris Thome, Stefan Conrad
Germany
- Data Profiling for Change Rules
Nishttha Sharma, Fei Chiang
Canada
- Causally-constrained Power Indices: Predicate Attribution for Aggregate Query Explanations
Pouya Khani, Yuchen Zhang, Ira Assent
Denmark

10:30 - 11:00 Coffee Break Foyer, 1st fl.

11:00 - 12:30 **DEXA - 11** **Track: 1**

Data Governance, Quality and Integration

Room: SZ01.18, 1st fl.

Session chair: TBA

- An Evidence-Based Method for Assessing Data Governance Maturity
Marcio Ferro, Edison Camilo, Flavio Medeiros, André Magno, André Almeida, Patrick Brito, Renata Pereira, Juliana Saraiva
Brazil
- Towards Semi-Automated Data Supply Chain Management
Thomas Hütter, Manuela Geiß, Christian Lettner, Tobias Rehberger, Gerald Aigner
Austria
- MultiCleansing: Scalable Simultaneous Repairing of Data with Multi-Types of Errors
Savong Bou, Toshiyuki Amagasa
Japan
- Evaluating Data Quality Tools: Measurement Capabilities and LLM Integration
Tobias Rehberger, Thomas Hütter, Lisa Ehrlinger, Wolfram Wöß
Austria

11:00 - 12:30	DEXA - 12	Track: 2
----------------------	------------------	-----------------

- Temporal Data Analytics & Forecasting (2)

Room: HS01.15, 1st fl.

- Machine Learning Foundations and Data Generation (2)

- Systems, Security and Emerging Applications (2)

Session chair: TBA

- PhenoNorm: A Phenology-Aligned Framework for Robust Multi-Country Crop Yield Prediction
Parna Asadi, Verena Kantere, Iluju Kiringa
Canada
- SynGenEva: A Generator-Agnostic Evaluation Protocol for Synthetic Tabular Data
Yi Chen, Verena Kantere
Canada
- XPOSE: Bi-directional Engineering for Hidden Query Extraction
Ahana Pradhan, Jayant Haritsa
India
- Locki: Neural Networks That Only Behave When Unlocked via Runtime Decryption
Hannes Sochor, Martin Schwandtner, Daniel Dorfmeister, Bernhard Fischer, Flavio Ferrarotti, Jürgen Fuß
Austria

10:30 - 12:30	DAWAK - 6	Track: 3
----------------------	------------------	-----------------

Database & Graph Systems (1)

Room: HS01.14, 1st fl.

Session chair: Paweł Misiorek

- Database Tuning via Distributional Reinforcement Learning for Hybrid Transactional/Analytical Processing Workload
Md Rakibul Hasan, Xiaoying Wu, Dimitri Theodoratos
USA
- How Good are Learned and Hybrid Join Order Strategies from Energy Perspective?
Khadidja Bennamane, Cheikh Salmi, Ladjel Bellatreche
France, Algeria
- GPU-Accelerated Dependency Graph Construction and Conflict Analysis for Preventing Read-Only Anomalies
Reo Chiyomaru, Takamitsu Shioi, Qiong Chang, Jun Miyazaki
Japan
- Evaluating Sustainability in Graph Intelligence
Pierre-Paul Cavallera, Landy Andriamampianina, Moncef Garouani, Franck Ravat, Jiefu Song, Nathalie Vallès-Parlangeau
France

12:30 - 13:30	Lunch	Aula's Foyer, 1st fl.
----------------------	--------------	---

13:30 - 15:00	DEXA - 13	Track: 1
----------------------	------------------	-----------------

Neural Networks and Applied AI (2)

Room: SZ01.18, 1st fl.

Session chair: TBA

- Deep Learning Techniques to Enhance Multimodal Single Cell Analysis
Ming Yu, Wei Li, Fang Lu, Dongyun Nie
Ireland, UK, China
- A unified multi-branch framework for real-time multi-rate CNC anomaly detection: classical vs deep learning models
Slimane Arbaoui, Ali Ayadi, Ahmed Samet, Tedjani Mesbahi, Romuald Boné
France
- Budget-Aware Local-Global Fusion for Object Detection on Edge Devices
Asera Wayne Asera, Will Li, Thanda Shwe, Israel Mendonça, Masayoshi Aritsugi
New Zealand, Japan

13:30 - 15:00	WORKSHOP - 3	Track: 2
	AI4IP WORKSHOP (2)	Room: HS01.15, 1st fl.
	<i>Session chair: TBA</i>	
	• Reinforcement Learning for Optimal Experiment Design in Parameter Identification of Mechatronic Systems <i>Julian Langschwert, Georg Schäfer, Jakob Rehrl, Stefan Huber, Simon Hirländer</i> <i>Austria</i> • Reconstructing OPC UA Address Spaces from Time-Series Databases <i>Lukas Lürzer, Hannes Unger, Stefan Huber</i> <i>Austria</i> • Self-Supervised CAD-Face Localization in Technical Drawings <i>Manuel Götz, Max Grieshammer, Philipp Kellner, Frank Schirmeier</i> <i>Germany</i> • Challenges in Multimodal Fusion of LiDAR and Camera Data for Road Surface Analysis <i>Simon Hardt, Matthias Micheler, Gesine Wagner, Ulrich Göhner</i> <i>Germany</i>	
13:30 - 15:00	DAWAK - 7	Track: 3
	- Database & Graph Systems (2)	Room: HS01.14, 1st fl.
	- Responsible AI & Learning (2)	
	- Data Lakes & Lakehouses (2)	
	<i>Session chair: Enrico Galinucci</i>	
	• A Verifiable Query Processing for Distributed Property Graphs <i>Tomoka Tegawa, Toshiyuki Amagasa</i> <i>Japan</i> • Calibration improves detection of mislabeled examples <i>Ilies Chibane, Thomas George, Pierre Nodet, Vincent Lemaire</i> <i>France</i> • SmartIngest: A Unified Framework for Adaptive Data Ingestion and Management in Lakehouse Architectures <i>Ahmed A. Harby, Farhana Zulkerniner</i> <i>Canada</i>	
15:00 - 15:30	CLOSING	Aula Room 1st fl.