The 33rd DEXA Conferences & Workshops 2022
22 - 24 August 2022
Vienna University of Economics and Business (WU), Vienna, Austria
The 33rd DEXA Conferences & Workshops 2022
22 - 24 August 2022
Vienna University of Economics and Business (WU), Vienna, Austria

CONFERENCES

DEXA 2022
33rd International Conference on Database and Expert Systems Applications

DaWaK 2022
24th International Conference on Big Data Analytics and Knowledge Discovery

EGOVIS 2022
11th International Conference on Electronic Government and the Information Systems Perspective

TrustBus 2022
The 19th International Conference on Trust, Privacy and Security in Digital Business

WORKSHOPS

AI Sys 2022
2nd International Workshop on AI System Engineering: Math, Modelling and Software

ARTE 2022
International Workshop on Applied Research, Technology Transfer and Knowledge Exchange in Software and Data Science

MLKgraphs 2022
1st International Workshop on Machine Learning and Knowledge Graphs

IWCFS 2022
3rd International Workshop on Cyber-Security and Functional Safety in Cyber–Physical Systems

DLRT 2022
International Workshop on Distributed Ledgers and Related Technologies

ProTime 2022
The 2nd International Workshop on Time Ordered Data
# Content

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Welcome Message

Welcome to the 33rd DEXA 2022 Conferences & Workshops!

DEXA was founded more than 30 years ago by Prof. Dr. Roland Wagner and Prof. Dr. A Min Tjoa to meet a crucial need for an international conference to address the emerging trends of Databases and Expert Systems Applications at that time.

As the conference organisers, it is so gratifying to see the growth of DEXA from a gathering of innovative academics 33 years ago here in Austria into an impressive international assembly with over 5000 international participants and additional distinguished speakers and guests in the last 33 years. We are now back in person to Austria the country where the seed of DEXA was planted after two years of virtual conferences.

DEXA 2022 is thriving thanks to the fruitful cooperation of the Institute of Telecooperation, Johannes Kepler University Linz, the Software Competence Center Hagenberg (SCCH) and WU (Vienna University of Economics and Business).

And as always, we endeavor to provide you with three distinct levels of experiences: A Learning Experience... which this year includes a very strong program of thought provoking 150 presentations and three distinguished keynote speeches in over 30 sessions, A Networking Experience... giving you the opportunity to form productive collaborations and lasting friendships with like-minded academics around the globe which can be seen from this year participants coming from 27 countries and over 200 research and academic institutions, and A Motivational Experience... exposing our young and up-coming colleagues to the latest innovations in our fields as a springboard to their own research and discoveries.

With respect to the social program, we have a very interesting program this year which consists of a Welcome Reception and a Conference Dinner that we decided to take you to enjoy a stunning dinner at the legend Restaurant of “Schweizerhaus”.

As the conference organisers, we would like to express our sincere thanks to the DEXA conferences and workshops program committee chairs and all members of the program committees for carefully reviewing all paper submissions and for putting together this interesting program. We are convinced that you will be inspired by the presentations and talks constituting this year’s program and hope that this will also lead to subsequent cooperation.

We are very grateful to our distinguished keynote speakers: Prof. Dr. Ricardo Baeza-Yates from the institute for Experiential AI, Northeastern University, USA, Dr. Sabrina Kirrane from Vienna University of Economics and Business, Institute for Information Systems and New Media, Austria and Prof. Dr. Philippe Cudre-Mauroux from The eXascale Infolab, University of Fribourg, Switzerland.
We tried our best in arranging everything locally for your comfort. These people and many others behind the scenes created this special spirit which makes all of us feel like coming home every year when we meet at DEXA.

So welcome to Vienna for 2022 DEXA conferences and workshops... Thank You for your participation... we sincerely hope you enjoy the conference.

Gabriele Kotsis
A Min Tjoa
Ismail Khalil
The Organization

Steering Committee:
- Gabriele Kotsis, Johannes Kepler University Linz, Austria
- A Min Tjoa, Technical University of Vienna, Austria
- Robert Wille, Software Competence Center Hagenberg, Austria
- Bernhard Moser, Software Competence Center Hagenberg, Austria
- Alfred Taudes, Vienna University of Economics and Business, Austrian and Blockchain Center, Austria
- Ismail Khalil, Johannes Kepler University Linz, Austria

DEXA Program Committee co-Chairs:
- Christine Strauss, University of Vienna, Austria
- Alfredo Cuzzocrea, University of Calabria, Italy

DaWaK Program Committee co-Chairs:
- Robert Wrembel, Poznan University of Technology, Poland
- Johann Gamper, Free University of Bozen-Bolzano, Italy

EGOVIS Program Committee co-Chairs:
- Andrea Kő, Corvinus University Budapest, Hungary
- Enrico Francesconi, Italian National Resaerch Council, Publication Office of the EU, Italy

AISys Workshop co-Chairs:
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- Maqbool Khan, PAF-IAST, Pakistan
- Gerald Czech, Upper Austrian Fire Brigade Association, Austria
- Thomas Hoch, Software Competence Center Hagenberg, Austria
- Bernhard Moser, Software Competence Center Hagenberg, Austria

ARTE Workshop co-Chairs:
- Lukas Fischer, Software Competence Center Hagenberg, Austria
- Rudolf Ramler, Software Competence Center Hagenberg, Austria

DLRT Workshop co-Chairs:
- Alfred Taudes, Vienna University of Economics and Business, Austrian and Blockchain Center, Austria
- Edgar Weippl, University of Vienna, Austria
- Bernhard Haslhofer, AIT - Austrian Institute of Technology, Austria

IWCFS Workshop co-Chairs:
- Atif Mashkoor, Johannes Kepler University Linz, Austria
- Johannes Sametinger, Johannes Kepler University Linz, Austria

MLKgraphs Workshop co-Chairs:
- Jorge Martinez-Gil, Software Competence Center Hagenberg, Austria
**ProTIME Workshop co-Chairs:**
- Siegfried Hörmann, TU-Graz, Austria
- Hans Manner, University of Graz, Austria
- Florian Sobieczky, Software Competence Center Hagenberg, Austria

**TrustBus Program Committee co-Chairs:**
- Steven Furnell, University Of Nottingham (UK)
- Sokratis Katsikas, Norwegian University Of Science And Technology – NTNU (Norway)

**Organizing Committee:**
- Birgit Kranzl, Johannes Kepler University Linz, Austria
- Hesti Sudjana, Johannes Kepler University Linz, Austria
- Paul Wiesinger, Johannes Kepler University Linz, Austria
- Heriansyah, Johannes Kepler University Linz, Austria

**Co-Organizers & Sponsors:**
- Software Competence Center Hagenberg (SCCH)
- Johannes Kepler University Linz (JKU Linz)
- The International Organization for Information Integration and Web-based Applications & Services (@WAS Organization)
- Vienna University of Economics and Business (WU)
- Austrian Society for Artificial Intelligence (ASAI)
- Austria Blockchain Center (ABC Research)
Keynote Talk 1
Monday, 22 August 2022, 17:00 – 18:00

Responsible AI
by Ricardo Baeza-Yates, Institute for Experiential AI at Northeastern University, USA

Abstract:
In the first part we cover five current specific problems that motivate the needs of responsible AI: (1) discrimination (e.g., facial recognition, justice, sharing economy, language models); (2) phrenology (e.g., biometric based predictions); (3) unfair digital commerce (e.g., exposure and popularity bias); (4) stupid models (e.g., minimal adversarial AI) and (5) indiscriminate use of computing resources (e.g., large language models). These examples do have a personal bias but set the context

for the second part where we address four challenges: (1) too many principles (e.g., principles vs. techniques), (2) cultural differences; (3) regulation and (4) our cognitive biases. We finish discussing what we can do to address these challenges in the near future to be able to develop responsible AI.

Short Bio:
Ricardo Baeza-Yates is Director of Research at the Institute for Experiential AI of Northeastern University. Before, he was VP of Research at Yahoo Labs, based in Barcelona, Spain, and later in Sunnyvale, California, from 2006 to 2016. He is co-author of the best-seller Modern Information Retrieval textbook published by Addison-Wesley in 1999 and 2011 (2nd ed), that won the ASIST 2012 Book of the Year award. From 2002 to 2004 he was elected to the Board of Governors of the IEEE Computer Society and between 2012 and 2016 was elected for the ACM Council. In 2009 he was named ACM Fellow and in 2011 IEEE Fellow, among other awards and distinctions. He obtained a Ph.D. in CS from the University of Waterloo, Canada, in 1989, and his areas of expertise are web search and data mining, information retrieval, bias on AI, data science and algorithms in general.
Following the rules: From Policies to Norms
by Sabrina Kirrane, Vienna University of Economics and Business (WU), Vienna, Austria

Abstract:
Since its inception, the world wide web has evolved from a medium for information dissemination, to a general information and communication technology that supports economic and societal interaction and collaboration across the globe. Existing web-based applications range from e-commerce and e-government services, to various media and social networking platforms, many of whom incorporate software agents, such as bots and digital assistants. However, the original semantic web vision, whereby machine readable web data could be automatically actioned upon by intelligent software web agents, has yet to be realised. In this talk, we will show how rules, in the form of policies and norms, can be used to specify a variety of data usage constraints (access policies, licenses, privacy preferences, regulatory constraints), in a manner that supports automated enforcement or compliance checking. Additionally, we discuss how, when taken together, policies, preferences, and norms can be used to afford humans more control and transparency with respect to individual and collaborating agents. Finally, we will highlight several open challenges and opportunities.

Short Bio:
Dr. Sabrina Kirrane is an assistant professor at the Vienna University of Economics and Business Institute for Information Systems and New Media. In addition, she is the Vice President of the Semantic Technology Institute International and the Founding Director of the Sustainable Computing Lab. She is also a member of the Vienna University of Economics and Business Research Institute for Cryptoeconomics. Dr. Kirrane was the Scientific/Technical Co-ordinator of the SPECIAL H2020 project from 2017 to 2019. Sabrina co-founded the Society, Privacy and the Semantic Web - Policy and Technology (PrivOn) workshop, which was co-located with the International Semantic Web Conference between 2013 and 2017. She is on the editorial board of the Journal of Web Semantics and the Semantic Web Journal. Over the years, she has also been on the organising committee of the International Semantic Web Conference (ISWC), the Extended Semantic Web Conference (ESWC), and the International Conference on Semantic Systems (Semantics). Her research primarily focuses on Security and Privacy aspects of the Semantic Web, Linked Data, Next Generation Internet (NGI), Big Data and Data Science, with a particular focus on policy representation and reasoning (e.g., access constraints, usage policies, regulatory obligations, societal norms, business processes), distributed data and decentralised applications, and trust and transparency mechanisms.
Keynote Talk 3  
Wednesday, 28 August 2022, 09:00 – 10:00

**Big Data Integration**  
by Philippe Cudre-Mauroux  
The eXascale Infolab at the University of Fribourg in Switzerland

**Abstract:**  
Until recently, structured (e.g., relational) and unstructured (e.g., textual) data were managed very differently: Structured data was queried declaratively using languages such as SQL, while unstructured data was searched using boolean queries over inverted indices. Today, we witness the rapid emergence of Big Data Integration techniques leveraging knowledge graphs to bridge the gap between different types of contents and integrate both unstructured and structured information more effectively. I will start this talk by giving a few examples of Big Data Integration. I will then delve into modern data integration techniques leveraging neuro-symbolic architectures, before describing two recent systems built in my lab: ZenCrowd, a socio-technical platform that automatically connects Web documents to semi-structured entities in a knowledge graph, and Guider, a Big Data Integration system for the cloud.

**Short Bio:**  
Philippe Cudre-Mauroux is a Full Professor and the Director of the eXascale Infolab at the University of Fribourg in Switzerland. He received his Ph.D. from the Swiss Federal Institute of Technology EPFL, where he won both the Doctorate Award and the EPFL Press Mention in 2007. Before joining the University of Fribourg, he worked on information management infrastructures at IBM Watson (NY), Microsoft Research Asia and Silicon Valley, and MIT. He recently won the Verisign Internet Infrastructures Award, a Swiss National Center in Research award, a Google Faculty Research Award, as well as a 2 million Euro grant from the European Research Council. His research interests are in next-generation, Big Data management infrastructures for non-relational data and AI. Webpage: http://exascale.info/phil
## Program Structure

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<td>Room: TC 5.05</td>
<td>Room: Galerie</td>
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<tr>
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<td>09:00 - 09:30</td>
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<td>09:30 - 10:30</td>
<td>T1.1.1 VIRTUAL DEXA 1 Deep Learning 1 T2.1.1 DAWAK 1 Text Analytics 1 T3.1.1 DEXA 2 Knowledge Graphs 1 T4.1.1 DEXA 3 Privacy-Preservation Approaches 1</td>
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<td>10:30 - 11:00</td>
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<td>11:00 - 12:30</td>
<td>T1.1.2 VIRTUAL DEXA 4 Deep Learning 2 T2.1.2 DEXA 5 Neural Networks T3.1.2 AllSys 1 T4.1.2 DLRT 1 DLT and Security</td>
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<td>13:30 - 15:00</td>
<td>T1.1.3 VIRTUAL DEXA 6 Smart Cities and Human Computing T2.1.3 DAWAK 2 Text Analytics 2 T3.1.3 AllSys 2 T4.1.3 DLRT 2 DLT Applications</td>
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<td>15:30 - 17:00</td>
<td>T1.1.4 MLGraphs T2.1.4 DAWAK 3 Data Warehousing and OLAP T3.1.4 e-Government Theoretical background T4.1.4 DEXA 7 Privacy-Preservation Approaches 2</td>
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<td>17:00 - 18:00</td>
<td>Keynotes Talk 1: “Responsible AI” Presentation of the OCG Förderpreis 2022</td>
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<td>18:00 - 18:30</td>
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### Room Location

- **Registration**: TC Hall, TC Building, ground fl.
- **Opening, Plenary Sessions, Track 1 and Closing**: Festaal 2, LC Building, ground fl.
- **Track 2**: TC 5.03, TC Building, 5th fl.
- **Track 3**: TC 5.05, TC Building, 5th fl.
- **Track 4**: Galerie, LC Building, ground fl.
- **Track 5**: TC 5.13, TC Building, 5th fl.
- **Coffee Break, Lunch**: Forum, LC Building, ground fl.
- **Welcome Reception**: Festaal 1, LC Building, ground fl.

### Virtual Sessions

- **Track 1**: https://jou.zoom.us/j/98986154425?pwd=Ws6Q1UlmaDiZbKXNTX25UjzqZU5u Meeting ID: 989 8615 4425. Passwort: 593623
- **Track 4**: https://jou.zoom.us/j/91906637777?pwd=NGlwSTZuQ2xNNGp2ODEXaG9iZ21c9QT09 Meeting ID: 919 0663 7777. Passwort: 943989
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<td>10:30 - 12:30</td>
<td>Coffee Breaks @ FORUM, LC Building</td>
<td>T1.2.1: VIRTUAL DEXA 8 Advanced Machine Learning 1</td>
<td>T2.2.1: DAWAK 4 Feature Selection Algorithms</td>
<td>T3.2.1: EGOVIS 2 Semantic technologies and legal issues &amp; Artificial Intelligence and Machine Learning in e-Government Context</td>
<td>T4.2.1: VIRTUAL DEXA 9 Advanced Analytics Methodologies and Methods 1</td>
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<td>T2.2.3: DAWAK 6 Schema Discovery and Construction</td>
<td>T3.2.3: DEXA 12 Time Series, Streams and Event Data</td>
<td>T4.2.3: VIRTUAL EGOVIS 4 E-government and Smart Solutions &amp; all</td>
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<td>18:00 - 21:00</td>
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<td>T1.3.1: DEXA 14 Sequences and Graphs</td>
<td>T2.3.1: DAWAK 7 Machine Learning</td>
<td>T3.3.1: ARTE 1</td>
<td>T4.3.1: VIRTUAL DEXA 13 Warehousing Methodologies &amp; all</td>
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<td>T1.3.2: VIRTUAL DAWA 8 Pattern Discovery &amp; all</td>
<td>T3.3.2: ARTE 2</td>
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<td>T1.3.3: DEXA 15 Advanced Analytics Methodologies and</td>
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## Program Details

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**Welcome Speech by Gabriele Kotsis, Conference Steering Committee Chair DEXA 2022**

### Parallel Session: Paper Presentation

**Track 1: DEXA-1 (Virtual)**

**Zoom Link:** https://jku.zoom.us/j/98981944495?pwd=dW5oQUJmaDi zbXNNTXZISUZQWUkwdz09

**Meeting-ID:** 989 8194 4495, **Password:** 591623

**Deep Learning 1**

**Session Chair:** Pinar Karagoz

- *Deep Active Learning Framework for Crowdsourcing-enhanced Image Classification and Segmentation*
  - Zhiyao Li, Xiaofeng Gao, Guihai Chen

- *Jointly Learning Propagating Features on the Knowledge Graph for Movie Recommendation*
  - Yun Liu, Jun Miyazaki, Qiong Chang

**Track 2: DAWAK-1**

**Room: TC 5.03**

**Text Analytics 1**

**Session Chair:** Johann Gamper

**DAWAK2022 Welcome Notes**

Johann Gamper & Robert Wrembel

**Sarcastic RoBERTa: a RoBERTa-based deep neural network detecting sarcasm on Twitter**

Maciej Hercog, Piotr Jaroński, Jan Kolanowski, Paweł Mieczyński, Dawid Wiśniewski, Jędrzej Potoniec
09.30 – 10.30

Parallel Session: Paper Presentation

An Integration of TextGCN and Autoencoder into Aspect-based Sentiment Analysis  
Yi-Hang Tsai, Chia-Ming Chang, Kun-Hsiang Chen, San-Yih Hwang

Track 3: DEXA-2  
Knowledge Graphs 1  
Session Chair: Michele Missikoff

Syntax-informed Question Answering with Heterogeneous Graph Transformer  
Fangyi Zhu, Lok You Tan, See-Kiong Ng, Stéphane Bressan
Towards Efficient Human Action Retrieval based on Triplet-Loss Metric Learning  
Iris Kico, Jan Sedmidubsky, Pavel Zezula

Track 4: DEXA-3  
Privacy-Preservation Approaches 1  
Session Chair: Alfredo Cuzzocrea

Privacy issues in smart grid data: from energy disaggregation to disclosure risk  
Kayode Sakariyah Adewole, Vicenc Torra
CoK: A Survey of Privacy Challenges in Relation to Data Meshes  
Nikolai Jannik Podlesny, Anne V.D.M. Kayem, Christoph Meinel

10.30 – 11.00

Coffee Break @FORUM, LC Building

11.00 – 12.30

Parallel Session: Paper Presentation

Track 1: DEXA-4 (Virtual)  
Zoom Link: https://jku.zoom.us/j/98981944495?pwd=dW5oQUJmaDIzbXNNTXZISUZQWUkwdz09  
Meeting-ID: 989 8194 4495, Password: 591623
Deep Learning 2  
Session Chair: Yael Amsterdamer

I-PNN: An Improved Probabilistic Neural Network for Binary Classification of Imbalanced Medical Data  
Ivan Izonin, Roman Tkachenko, Michal Gregus
Parallel Session: Paper Presentation

DeepCore: A Comprehensive Library for Coreset Selection in Deep Learning
Chengcheng Guo, Bo Zhao, Yanbing Bai

Context Iterative Learning for Aspect-Level Sentiment Classification
Wenting Yu, Xiaoye Wang, Peng Yang, Yingyuan Xiao, Jinsong Wang

A Divergent Index Advisor Using Deep Reinforcement Learning
Zahra Sadri, Le Gruenwald

Track 2: DEXA-5
Neural Networks
Session Chair: Toshiyuki Amagasa

Reconciliation of Mental Concepts with Graph Neural Networks
Lorenz Wendlinger, Gerd Hübscher, Andreas Ekelhart, Michael Granitzer

Sentiment and Knowledge Based Algorithmic Trading with Deep Reinforcement Learning
Abhishek Nan, Anandh Perumal, Osmar R. Zaiane

PBRE: A Rule Extraction Method from Trained Neural Networks Designed for Smart Home Services
Mingming Qiu, Elie Najm, Rémi Sharrock, Bruno Traverson

EcoLight: Eco-friendly Traffic Signal Control Driven By Urban Noise Prediction
Chahinez Ounoughi, Ghofrane Touibi, Sadok Ben Yahia

Track 3: AISys-1
Session Chair: Bernhard Moser

Unboundedness of Linear Regions of Deep ReLU Neural Networks
Anton Ponomarchuk, Christoph Koutschan, Bernhard Moser
11.00 – 12.30
Parallel Session: Paper Presentation

Applying time-inhomogeneous Markov chains to math performance rating
Eva-Maria Infanger, Gerald Infanger, Zsolt Lavicza, Florian Sobieczky

A Comparative Analysis of Anomaly Detection Methods for Predictive Maintenance in SME
Muhammad Qasim, Maqbool Khan, Waqar Mehmood, Florian Sobieczky, Mario Pichler, Bernhard Moser

Track 4: DLRT-1
DLT and Security
Session Chair: Edgar Weippl

Securing File System Integrity and Version History via Directory Merkle Trees and Blockchains
Andreas Lackner, Seyed Amid Moeinzadeh Mirhosseini, Stefan Craß

Sending spies as insurance against Bitcoin pool mining block withholding attacks
Isamu Okada, Hannelore de Silva, Krzysztof Paruch

Comparison Framework for Blockchain Interoperability Implementations
Alexander Neulinger

12.30 – 13.30
Lunch @FORUM, LC Building

13.30 – 15.00
Parallel Session: Paper Presentation

Track 1: DEXA-6 (Virtual)
Zoom Link: https://jku.zoom.us/j/98981944495?pwd=dW5oQUJmaDIzbXNNTXZISUZQWUkwdz09
Meeting-ID: 989 8194 4495, Password: 591623
Smart Cities and Human Computing
Session Chair: Rongbo Chen

Effective and Robust Boundary-based Outlier Detection using Generative Adversarial Networks
Qiliang Liang, Ji Zhang, Mohamed Jaward Bah, Hongzhou Li, Liang Chang, Raze Uday Kiran
Parallel Session: Paper Presentation

**Mining Fluctuation Propagation Graph among Time Series with Active Learning**
Mingjie Li, Minghua Ma, Xiaohui Nie, Kanglin Yin, Li Cao, Xidao Wen, Zhiyun Yuan, Duogang Wu, Guoying Li, Wei Liu, Xin Yang, Dan Pei

**KAPP: Knowledge-Aware Hierarchical Attention Network for Popularity Prediction**
Shuodian Yu, Jianxiong Guo, Xiaofeng Gao, Guihai Chen

**Self-Supervised Learning for Building Damage Assessment from Large-scale xBD Satellite Imagery Benchmark Datasets**
Zaishuo Xia, Zelin Li, Yanbing Bai, Jinze Yu, Bruno Adriano

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**Track 2: DAWAK-2**
**Text Analytics 2**
**Session Chair : Akrivi Vlachou**

**A Fast NDFA-Based Approach to Approximate Pattern-Matching for Plagiarism Detection in Blockchain-Driven NFTs**
Darius Galis, Ciprian Pungila, Viorel Negru

**Text-based Causal Inference on Irony and Sarcasm Detection**
Recep Firat Cekinel, Pinar Karagoz

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**Track 3: AISys-2**
**Session Chair : Bernhard Moser**

**A Comparative Study Between Rule-Based and Transformer-Based Election Prediction Approaches: 2020 US Presidential Election as a Use Case**
Asif Khan, Huaping Zhang, Nada Boudjellal, Lin Dai, Arshad Ahmad, Jianyun Shang, Philipp Haindl

**Detection of the 3D Ground Plane from 2D Images for Distance Measurement to the Ground**
Ozan Cakiroglu, Volkmar Wieser, Werner Zellinger, Adriano Souza Ribeiro, Werner Klohofer, Florian Kromp
### Parallel Session: Paper Presentation

**Towards Practical Secure Privacy-Preserving Machine (Deep) Learning with Distributed Data**  
Mohit Kumar, Bernhard Moser, Lukas Fischer, Bernhard Freudenthaler

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**Track 4: DLRT-2**  
**DLT Applications**  
**Session Chair**: Bernhard Haslhofer

- **Risks in DeFi-lending protocols – an exploratory categorization and analysis of interest rate differences**  
  Marco Huber, Vinzenz Treytl
- **Battling the Bullwhip Effect with Cryptography**  
  Martin Hrušovský, Alfred Taudes
- **Reporting of Cross-Border Transactions for Tax Purposes via DLT**  
  Ivan Lazarov, Quentin Botha, Nathalia Oliveira Costa, Jakob Hackel
- **Taxation of Blockchain Staking Rewards: Propositions based on a Comparative Legal Analysis**  
  Pascal René Marcel Kubin

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### 15.00 – 15.30

**Coffee Break @FORUM, LC Building**

**Track 1: MLKgraphs**  
**Session Chair**: Lisa Ehrlinger

- **A Lifecycle Framework for Semantic Web Machine Learning Systems**  
  Anna Breit, Laura Waltersdorfer, Fajar J. Ekaputra, Tomasz Miksa, Marta Sabou
- **Enhancing TransE to Predict Process Behavior in Temporal Knowledge Graphs**  
  Aleksei Karetnikov, Lisa Ehrlinger, Verena Geist
15.30 – 17.00

**Parallel Session: Paper Presentation**

**An Explainable Multimodal Fusion Approach for Mass Casualty Incidents**
Zoe Vasileiou, Georgios Meditskos, Stefanos Vrochidis, Nick Bassiliades

**Track 2: DAWAK-3**
Data Warehousing and OLAP  
Session Chair: Robert Wrembel

**On Decisive Skyline Queries**
Akrivi Vlachou, Christos Doulkeridis, João B. Rocha-Junior, Kjetil Nørvåg

**Safeness: Suffix Arrays driven Materialized View Selection Framework for Large-Scale Workloads**
Kechar Mohamed, Ladjel Bellatreche

**A Process Warehouse for Process Variants Analysis**
Lisana Berberi

**Track 3: EGOVIS-1**
e-Government theoretical background  
Session Chair: Andrea Kő

**EGOVIS2022 Welcome Notes**
Andrea Kő

**Notions of Fairness in Automated Decision Making: An Interdisciplinary approach to Open Issues**
Yasaman Yousefi

**Object Relational Mapping vs. Event-Sourcing: Systematic review**
Michail Pantelelis, Christos Kalloniatis

**Foundation Models in Healthcare: Opportunities, Biases and Regulatory Prospects in Europe**
Malwina Anna Wojcik
15.30 – 17.00  Parallel Session: Paper Presentation

Track 4: DEXA-7
Privacy-Preservation Approaches 2
Session Chair: Jakob Hackel

Why- and How-Provenance in distributed environments
Paulo Sérgio Pintor, Rogério Luís De Carvalho Costa, José Moreira

Provenance-Based SPARQL Query Formulation
Yael Amsterdamer, Yehuda Callen

Anonymisation of Heterogeneous Graphs with Multiple Edge Types
Guillermo Alamán Requena, Andreas Ekelhart, Rudolf Mayer

17.00 – 18.00  Paper Presentation

Keynote Talk 1
Session Chair: Gabriele Kotsis
Zoom Link: https://jku.zoom.us/j/98981944495?pwd=dW5oQUJmaDIzbXNNTXZISUZQWUkwdz09
Meeting-ID: 989 8194 4495, Password: 591623

“Responsible AI”
Ricardo Baeza-Yates, Institute for Experiential AI at Northeastern University, USA

18.00 – 18.30  Presentation of the OCG Förderpreis 2022

18.30 – 21.00  Welcome Reception and WU Jazz Faculty
Norman Revell Best Paper Award and Roland Wagner Best Paper Award

18.00 – 18.00  Keynote Talk 2
Session Chair: Alfred Taudes
“Following the rules: From Policies to Norms”
Sabrina Kirrane, Institute for Information Systems and New Media @ Vienna University of Economics and Business, Austria
10.00 – 10.30
Coffee Break @FORUM, LC Building

10.30 – 12.30
Parallel Session: Paper Presentation

Track 1: DEXA-8 (Virtual)
https://jku.zoom.us/j/98981944495?
pwd=dW5oQUJmaDIzbXNNTXZISUZQWkwdz09
Meeting-ID: 989 8194 4495, Password: 591623
Advanced Machine Learning 1
Session Chair : Jennifer D’Souza

A Heterogeneous Network Representation Learning Approach for Academic Behavior Prediction
Li Huang, Yan Zhu

A Market Segmentation Aware Retail Itemset Placement Framework
Raghav Mittal, Anirban Mondal, P. Krishna Reddy

Label Selection Algorithm Based on Iteration Column Subset Selection for Multi-label Classification
Tao Peng, Jun Li, Jianhua Xu

A learned prefix bloom filter for spatial data
Beiji Zou, Meng Zeng, Chengzhang Zhu, Ling Xiao, Zhi Chen

Word Alignment based Transformer Model for XML Structured Documentation Translation
Jing An, Yecheng Tang, Yanbing Bai, Jiyi Li

Community Detection in Attributed Networks via Kernel-based Effective Resistance and Attribute Similarity
Clara Pizzuti, Annalisa Socievole

Track 2: DAWAK-4
Feature Selection Algorithms
Session Chair : Johann Gamper

Unsupervised Features Ranking via Coalitional Game Theory for Categorical Data
Chiara Balestra, Florian Huber, Andreas Mayr, Emmanuel Müller

Feature Selection Under Fairness and Performance Constraints
Ginel Dorleón, Imen Megdiche, Nathalie Bricon-Souf, Olivier Teste
10.30 – 12.30

Parallel Session: Paper Presentation

**Track 3: EGOVIS-2**
Semantic Technologies and Legal Issues & Artificial Intelligence and Machine Learning in e-Government Context
Session Chair: Rahul Sharma

Smart solutions in AgriTech: Research Trajectories in the Digital Transition
Salvatore Sapienza

Hybrid AI to Support the Implementation of the European Directive
Monica Palmirani

**Track 4: DEXA-9 (Virtual)**
https://jku.zoom.us/j/91906037771?pwd=NG1WSTZuQ2xnN0p1OEJXa09ha2I3QT09
Meeting-ID: 919 0603 7771, Password: 943989
Advanced Analytics Methodologies and Methods 1 & all
Session Chair: Alfredo Cuzzocrea

Diversity-oriented Route Planning for Tourists
Kong Wei Kun, Shuyuan Zheng, Nguyen Minh Le, Qiang Ma

Optimizing the Post-disaster Resource Allocation with Q-learning: Demonstration of 2021 China Flood
Linhao Dong, Yanbing Bai, Qingsong Xu, Erick Mas

ARDBS: Efficient Processing of Provenance Queries over Annotated Relations
Sareh Mohammadi, Nematollaah Shiri

CAKE: A Context-Aware Knowledge Embedding Model of Knowledge Graph
Jiadong Chen, Hua Ke, Haijian Mo, Xiaofeng Gao, Guihai Chen

Intelligent Air Traffic Management System Based on Knowledge Graph
Jiadong Chen, Xueyan Li, Xiaofeng Gao, Guihai Chen
10.30 – 12.30

**Parallel Session: Paper Presentation**

**Alps: An Adaptive Load Partitioning Scaling Solution for Stream Processing System on Skewed Stream**
Beiji Zou, Tao Zhang, Chengzhang Zhu, Ling Xiao, Meng Zeng, Zhi Chen

**Track 5: ProTime**

**Session Chair: Florian Sobieczky**

**Testing the equality of changepoints**
Hans Manner

**Log File Anomaly detection based on Process Mining Graphs**
Sabrina Luftensteiner, Patrick Praher

**A Scalable Microservice Infrastructure for Fleet Data Management**
Rainer Meindl, Konstantin Papesh, David Baumgartner, Emmanuel Helm

**Learning Entropy: on Shannon vs. Machine-Learning-Based Information in Time Series**
Ivo Bukovsky, Ondrej Budík

**Using Property Graphs to Segment Time-Series Data**
Aleksei Karetnikov, Tobias Rehberger, Christian Lettner, Johannes Himmelbauer, Ramin Nikzad-Langerodi, Günter Gsellmann, Susanne Nestelberger, Stefan Schützeneder

**A Synthetic Dataset for Anomaly Detection of Machine Behavior**
Sabrina Luftensteiner, Patrick Praher

12.30 – 13.30

**Lunch @FORUM, LC Building**

13.30 – 15.00

**Parallel Session: Paper Presentation**

**Track 1: IWCFS**

**Session Chair: Johannes Sametinger**

**Towards Strategies for Secure Data Transfer of IoT Devices with Limited Resources**
Sabrina Luftensteiner, Patrick Praher
Parallel Session: Paper Presentation

**Application of Validation Obligations to the Security Domain**
Sebastian Stock, Atif Mashkoor, Alexander Egyed

**Mode Switching for Secure Edge Devices**
Michael Riegler, Johannes Sametinger, Christoph Schönegger

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**Track 2: DAWAK-5**
**Time Series Processing**
Session Chair: Witold Andrzejewski

**Interpretable Input-Output Hidden Markov Model-Based Deep Reinforcement Learning for the Predictive Maintenance of Turbofan Engines**
Ammar N. Abbas, Georgios C. Chasparis, John D. Kelleher

**Pathology Data Prioritisation: A Study Using Multi-Variate Time Series**
Jing Qi, Girvan Burnside, Frans Coenen

**Outlier/Anomaly detection of univariate time series: A dataset collection and benchmark**
David Muhr, Michael Affenzeller

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**Track 4: DEXA-10**
**Knowledge Graphs 2**
Session Chair: Osmar R. Zaiane

**Automated Process Knowledge Graph Construction from BPMN models**
Stefan Bachhofner, Elmar Kiesling, Kate Revoredo, Philipp Waibel, Axel Polleres

**Analysis of Extracellular Potential Recordings by High-Density Micro-electrode Arrays of Pancreatic Islets**
Jan David Hüwel, Anne Gresch, Tim Berger, Martina Düfer, Christian Beecks

**The Digitalization of Bioassays in the Open Research Knowledge Graph**
Jennifer D’Souza, Anita Monteverdi, Muhammad Haris, Marco Anteghini, Kheir Eddine, Markus Stocker, Vitor A.P. Martins Dos Santos, Sören Auer
15.00 – 15.30
Coffee Break @FORUM, LC Building

15.30 – 17.30
Parallel Session: Paper Presentation

Track 1: DEXA-11
Advanced Machine Learning 2
Session Chair : Patitapaban Palo

Detecting Simpson's Paradox: A Machine Learning Perspective
Rahul Sharma, Huseyn Garayev, Minakshi Kaushik,
Sijo Sijo Arakkal Peious, Prayag Tiwari, Dirk Draheim

Accurately Predicting User Registration in Highly Unbalanced Real-World Datasets from Online News Portals
Eva-Maria Spitzer, Oliver Krauss, Andreas Stöckl

ReferEmo: A Referential Quasi-Multimodal Model for Multilabel Emotion Classification
Alvaro Esperanca, Xiao Luo

Track 2: DAWAK-6
Schema Discovery and Construction
Session Chair : Robert Wrembel

Automatic Machine Learning-based OLAP Measure Detection for Tabular Data
Yuzhao Yang, Fatma Abdelhédi, Jérôme Darmont, Franck Ravat, Olivier Teste

Discovering Overlapping Communities based on Cohesive Subgraph Models over Graph Data
Said Jabbour, Mourad Kmimich, Badran Raddaoui

Discovery of Keys for Graphs
Morteza Alipourlangouri, Fei Chiang

Track 3: DEXA-12
Time Series, Streams and Event Data
Session Chair : Alfredo Cuzzocrea

Clustering-based Cross-sectional Regime Identification for Financial Market Forecasting
Rongbo Chen, Mingxuan Sun, Kunpeng Xu, Jean-Marc Patenaude, Shengrui Wan
Parallel Session: Paper Presentation

Latent Relational Point Process: Network Reconstruction from Discrete Event Data
Guilherme Augusto Zagatti, See-Kiong Ng, Stéphane Bressan

InTrans: Fast Incremental Transformer for Time Series Data Prediction
Savong Bou, Toshiyuki Amagasa, Hiroyuki Kitagawa

A Knowledge-driven Business Process Analysis Methodology
Michele Missikoff

What Logical Model is Suitable for Relational Trajectory Data Warehouses? Application to Agricultural Autonomous Robots
Konstantinos Oikonomou, Georgia Garani, Sandro Bimonte, Robert Wrembel

Track 4: EGOVIS-4 (Virtual)
https://jku.zoom.us/j/91906037771?pwd=NG1WSTZuQ2xnN0p1OEJXa09ha2I3QT09
Meeting-ID: 919 0603 7771, Password: 943989
mgGovernment and smart solutions & all
Session Chair : Darius Galis

Good Practices of User Experience and Design Research for Mobile and Electronic Governmental Services
Rachelle Sellung, Marie Hölscher, Lisa Burgstaller-Hochenwarter

Semantic Annotation of Parliamentary Debates and Legislative Intelligence Enhancing Citizen Experience
Stéphane Gagnon, Sabrina Azzi

Comparative analysis of classification algorithms applied to circular trading prediction scenarios
Douglas Silva, Sergio T. Carvalho, Nadia Silva

Towards a method for the formulation of an EGOV strategy considering International Rankings
Wagner S. Araujo, Delfina Soares, João Carvalho

Can the GDPR Allay Privacy Concerns Towards Smart Products?
The Effect of a Compliance Seal on Perceived Data Security, Trust, and Intention to Use
Oliver Michler, Christian Stummer, Reinhold Decker

Derogations Analysis of European Legislation through Hybrid AI Approach
Monica Palmirani, Davide Liga
Wednesday, 24 August 2022

08.00 - 09.00
Registration
   Room: TC Hall

09.00 - 10.00
Paper Presentation

   Keynote Talk 3
   Session Chair: Robert Wrembel

   “Big Data Integration”
   Philippe Coudre-Mauroux, The eXascale Infolab at the
   University of Fribourg, Switzerland

10.00 - 10.30
Coffee Break @FORUM, LC Building

10.30 - 12.30
Parallel Session: Paper Presentation

Track 1: DEXA-14
Sequences and Graphs
   Session Chair: Savong Bou

   Extending Authorization Capabilities of Object
   Relational/Graph Mappers by Request Manipulation
   Daniel Hofer, Stefan Nadschlager, Aya Mohamed, Josef Kung

   Fault Detection in Seismic Data using and Graph
   Attention Network
   Patitapaban Palo, Aurobinda Routray, Sanjai Kumar Singh

   Comparison of Sequence Variants and the Application
   in Electronic Medical Records
   Yuqing Li, Hieu Hanh Le, Ryosuke Matsuo,
   Tomoyoshi Yamazaki, Kenji Araki, Haruo Yokota

   Hypergraphs as Conflict-free Partially Replicated Data Types
   Aruna Bansal
10.30 - 12.30

Parallel Session: Paper Presentation

**Quality versus speed in energy demand prediction.**
Experience report from an R&D project
Witold Andrzejewski, Jedrzej Potoniec, Maciej Drozdowski, Jerzy Stefanowski, Robert Wrembel, Pawel Stapf

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**Track 2: DAWAK-7**
**Pattern Discovery & Machine Learning**
**Session Chair : Niccolò Marastoni**

- **Explainable Recommendations for Wearable Sensor Data**
  Niccolò Marastoni, Barbara Oliboni, Elisa Quintarelli

- **Mahalanobis Distance Based K-Means Clustering**
  Paul O. Brown, Meng Ching Chiang, Shiqing Guo, Yingzi Jin, Carson K. Leung, Evan L. Murray, Adam G.M. Pazdor, Alfredo Cuzzocrea

- **Grapevine Phenology Prediction: A Comparison of Physical and Machine Learning Models**
  Francisco J. Lacueva-Pérez, Sergio Ilarri, Juan J. Barriuso, Joaquin Balduque, Gorka Labata, Rafael del Hoyo

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**Track 3: ARTE-1**
**Session Chair : Rudolf Ramler**

- **Twenty Years of Successful Translational Research - A Case Study of Three COMET Centers**
  Katja Bühler, Cornelia Travnicek, Veronika Nowak, Edgar Weippl, Lukas Fischer, Rudolf Ramler, Robert Wille

- **An untold tale of scientific collaboration: SCCH and AC2T**
  Somayeh Kargaran, Anna-Christina Glock, Bernhard Freudenthaler, Manuel Freudenberg, Martin Jech

- **A Technology Transfer Portal to Promote Industry-Academia Collaboration in South-Tyrol**
  Roberto Confalonieri, Andrea Janes
Parallel Session: Paper Presentation

Building a YouTube Channel for Science Communication
Frank Elberzhager, Patrick Mennig, Phil Stüpfert

Introduction of visual regression testing in collaboration between industry and academia
Thomas Wetzlmaier, Claus Klammer, Hermann Haslauer

On the Creation and Maintenance of a Documentation Generator in an Applied Research Context
Bernhard Dorninger, Michael Moser, Josef Pichler, Michael Rappl, Jakob Sautter

Track 4: DEXA-13 (Virtual)
https://jku.zoom.us/j/91906037771?pwd=NG1WSTZuQ2xnN0p1OEJXa09ha2I3QT09
Meeting-ID: 919 0603 7771, Password: 943989
Warehousing Methodologies & all
Session Chair : Oliver Krauss

BPF: An Effective Cluster Boundary Points Detection Technique
Vijdan Khalique, Hiroyuki Kitagawa

A Method for Summarizing Trajectories with Multiple Aspects
Vanessa L. Machado, Ronaldo dos Santos Mello, Vânia Bogorný

Skeleton-based Mutual Action Recognition Using Interactive Skeleton Graph and Joint Attention
Xiangze Jia, Ji Zhang, Zhen Wang, Yonglong Luo, Fulong Chen, Gaoming Yang

An Error-Bounded Space-Efficient Hybrid Learned Index with High Lookup Performance
Yuquan Ding, Xujian Zhao, Peiquan Jin

Sequence Recommendation Model with Double-layer Attention Net
Weilun Li, Peng Yang, Xiaoye Wang, Yingyuan Xiao

SLA-Aware Cloud Query Processing with Reinforcement Learning-based Multi-Objective Re-Optimization
Chenxiao Wang, Le Gruenwald, Laurent d’Orazio
Parallel Session: Paper Presentation

### Track 5: TrustBus Session 1
Session Chair: Steven Furnell

**TrustBus 2022 Welcome Notes**
Sokratis Katsikas and Steven Furnell

**PriPoCoG: Guiding Policy Authors to Define GDPR-Compliant Privacy Policies**
Jens Leicht, Maritta Heisel and Armin Gerl

**Closing the Gap between Privacy Policies and Privacy Preferences with Privacy Interfaces**
Stefan Becher, Felix Bolz and Armin Gerl

**A Constructive Approach for Raising Information Privacy Competences: The Case of Escape Room Games**
Thanos Papaioannou, Aggeliki Tsohou, Georgios Bounias and Stylianos Karagiannis

### Lunch @FORUM, LC Building

### 13.30 – 15.00
Parallel Session: Paper Presentation

**Track 1: DAWAK-8 (Virtual)**
https://jku.zoom.us/j/98981944495?pwd=dW5oQUJmaDIzbXNNTXZISUZQWUkwdz09
Meeting-ID: 989 8194 4495, Password: 591623
Machine Learning & all
Session Chair: Witold Andrzejewski

**OpBerg: Discovering causal sentences using optimal alignments**
Justin Wood, Nicholas Matiasz, Alcino Silva, William Hsu, Alexej Abyzov, Wei Wang

**Multi-label Online Streaming Feature Selection Algorithms via Extending Alpha-Investing Strategy**
Tianqi Ji, Xizhi Guo, Yunqian Li, Dan Li, Jun Li, Jianhua Xu

**OPTIMA: Framework Selecting Optimal Virtual Model to Query Large Heterogeneous Data**
Chahrazed B. Bachir Belmehdi, Abderrahmane Khiat, Nabil Keskes

**Q-VIPER: Quantitative Vertical Bitwise Algorithm to Mine Frequent Patterns**
Thomas J. Czubryt, Carson K. Leung, Adam G.M. Pazdor

**Enhanced Sliding Window-Based Periodic Pattern Mining from Dynamic Streams**
Evan W. Madill, Carson K. Leung, Justin M. Gouge
Track 3: ARTE-2
Session Chair: Lukas Fischer

Data Integration, Management, and Quality: From Basic Research to Industrial Application
Lisa Ehrlinger, Christian Lettner, Werner Fragner, Günter Gsellmann, Susanne Nestelberger, Franz Rauchenzauner, Stefan Schützeneder, Martin Tiefengraber, Jürgen Zeindl

From Data to Decisions – Developing Data Analytics Use-Cases in Process Industry
Johannes Himmelbauer, Michael Mayr, Sabrina Luftenstein

Towards the Digitalization of Additive Manufacturing
Carlos González-Val, Christian-Eike Precker, Santiago Muiños-Landin

Vibration analysis for rotatory elements wear detection in paper mill machine
Amaia Arrregi, Iñaki Inza, Iñigo Bedia

Challenges in Mass Flow Estimation on Conveyor Belts in the Mining Industry: A Case Study
Bernhard Heinzl, Christian Hinterreiter, Michael Roßbory, Christian Hinterdorfer

Introducing Data Science Techniques into a Company Producing Electrical Appliances
Tim Kreuzer, Andrea Janes

Track 5: TrustBus
Session 2
Session Chair: Sokratis Katsikas

Mitigating Sovereign Data Exchange Challenges: A Mapping to Apply Privacy- and Authenticity-Enhancing Technologies
Kaja Schmidt, Gonzalo Munilla Garrido, Alexander Mühle and Christoph Meinel

Sandboxing for Threat Detection and Mitigation for IoT
Simão Silva, Patrícia R. Sousa, João S. Resende and Luís Antunes

Homomorphic encryption in manufacturing compliance checks
Aikaterini Triakosia, Panagiotis Rizomiliotis, Konstantinos Tserpes, Cecilia Tonelli, Valerio Senni and Fabio Federici
Coffee Break @FORUM, LC Building

Parallel Session: Paper Presentation

Track 1: DEXA-15
Advanced Analytics Methodologies
and Methods II
Session Chair: Jing Qi

Analytical Algebra: Extension of Relational Algebra
Jakub Peschei, Michal Batko, Pavel Zezula

BLOCK-OPTICS: An efficient density-based clustering
based on OPTICS
Kota Yukawa, Toshiyuki Amagasa

What’s Next? Predicting Hamiltonian Dynamics from
Discrete Observations of a Vector Field
Zi-Yu Khoo, Delong Zhang, Stéphane Bressan

A Fuzzy Satisfaction Concept Based Approach for
Skyline Relaxation
Mohamed Haddache, Allel Hadjali, Hamid Azzoune

Quasi-Clique Mining for Graph Summarization
Antoine Castillon, Julien Baste, Hamida Seba,
Mohammed Haddad

Track 2: DEXA-16
Efficient Data Processing Techniques
Session Chair: Aruna Bansal

Accelerated Parallel Hybrid GPU/CPU Hash Table
Queries with String Keys
Tobias Groth, Sven Groppe, Thilo Pionteck, Franz Valdiek,
Martin Koppehel

Towards Efficient Discovery of Periodic-Frequent Patterns
in Dense Temporal Databases using Complements
P. Veena, Sreepada Tarun, R. Uday Kiran, Minh-Son Dao,
Koji Zettsu, Yutaka Watanobe, Ji Zhang

Continuous Similarity Search for Text Sets
Yuma Tsuchida, Kohei Kubo, Hisashi Koga

15.00 – 15.30
15.30 – 17.30
Parallel Session: Paper Presentation

Exploiting Embedded Synopsis for Exact and Approximate Query Processing
Hiroki Yuasa, Kazuo Goda, Masaru Kitsuregawa

Track 3: ARTE-3
Session Chair: Rudolf Ramler

Room: TC 5.05

A Table Extraction Solution for Financial Spreading
Duc Tuyen Ta, Siwar Jendoubi, Aurélien Baelde

Synthetic Data in Automatic Number Plate Recognition
David Brunner, Fabian Schmid

Fast and Automatic Object Registration for Human–Robot Collaboration in Industrial Manufacturing
Manuela Geiß, Martin Baresh, Georgios Chasparis, Edwin Schweiger, Nico Teringl, Michael Zwick

Collaborative aspects of solving rail-track multi-sensor data fusion
Florian Kromp, Fabian Hinterberger, Datta Konanur, Volkmar Wieser

Closing @Festsaal 2
DEXA 2022 Conferences and Workshops is taking place at Vienna University of Economics and Business (WU). Campus WU is located in Vienna’s second district.

WU Campus address is Welthandelsplatz 1, 1020 Vienna. Campus WU comprises 7 building complexes.

DEXA 2022 will be located in two buildings; LC building and TC building. These are the rooms that hold DEXA2022 activities:

**Rooms @ LC Building** (Library & Learning Center):
- Festsaal 2 : Opening, Plenary Sessions, Track 1, Closing
- Galeries : Track 4
- Festsaal 1 : Welcome Reception
- Forum : Coffee Breaks and Lunches

**Rooms @ TC Building** (Teaching Center)
- TC 5.03 ,5th fl : Track 2
- TC 5.05 ,5th fl : Track 3
- TC 5.13 ,5th fl : Track 5
- TC Hall, Ground fl : Registration

Source: https://campus.wu.ac.at/en/
How to reach WU Campus

By public transportation

Campus WU is located between the two U2 subway stations Messe–Prater and Krieau. The Library & Learning Center (LC) is roughly the same distance from each of the two subway stations (5–10 minutes).

- To access Campus WU from the west (WU Executive Academy, Administration, Department Buildings 3, 4, and 5, Library & Learning Center), please use the U2 subway station Messe–Prater, exit Messe.
- To access Campus WU from the east (Teaching Center, Student Center, Department Buildings 1 and 2, Library & Learning Center), please use the U2 subway station Krieau, exit Krieau. Bus line 82A (3 stops around the campus: Trabrennstraße, Südportalstraße, Welthandelsplatz)
- and streetcar line 1 (stop Prater Hauptallee) also stop close to Campus WU.

By Car

The underground parking garage is located under the main boulevard running through the campus. The entrance to the garage is on Trabrennstrasse. The garage has 411 parking spaces; 180 spaces are for short-term parking; the rest is reserved for long-term pass holders. There are four exits to the campus from the garage. All exits lead to the outside, so that visitors can enter all campus buildings from their main entrances on the ground floor.

By Bicycle

Bicycle parking spaces are located along the bike path circling the perimeter of the campus. Around 250 of these parking spaces are located in bike garages (access for pass holders only). Citybike bike sharing stations are located at the south entrance of Campus WU and at the subway stations Messe–Prater and Krieau.

1 Source: https://www.wu.ac.at/en/the-university/campus/orientation-directions
Welcome Reception
Monday, 22 August 2022, 18:30 – 21:00 at the Festsaal 1, LC building, WU Campus

Just after the last session of the first day, Monday, 22 August 2022, all DEXA 2022 participants are invited to a welcome reception at the Festsaal in the LC building. DEXA’s yearly awards: Norman Revell Best Paper Award and Roland Wagner Best Paper Award will be presented to the winner during this event. Presentation & performance from WU Jazz Faculty will impress all participants while enjoying the rest of the evening. Drinks and snacks will be served from 18:30 to 21:00.

Conference Dinner
Tuesday, 23 August 2022, 18:00 – 21:00,

On the second day DEXA 2022 invites all participants to a special Conference Dinner at the “Schweizerhaus” a legend Restaurant located in the popular place in Vienna, the Prater. The restaurant was built in 1868 with the name “Schweizer Meierei” (Swiss Diary) and later become “Schweizerhaus” until present.

(https://schweizerhaus.at/index.asp)
Guests of this award-winning gastronomy house will experience extraordinary hospitality and their original Budweiser Budvar.

Schweizerhaus’s address: Prater 116, A-1020 Vienna

The place is a walking distance from WU Campus. Head southwest toward Welthandelsplatz, onto Freudplatz and turn left onto Straße des Ersten Mai and walk until reach the restaurant. Other way to reach the place:

- By car/taxi: coming from Ausstellungsstraße, turn into Perspektivstraße, onto the Freudplatz (Sigmund Freud Campus), here you can park your car in a metered-parking space or parking garage around the area and continue by foot along Straße des ersten Mai until you reach the restaurant.
- By public transport: Take the U2 line to the “Prater-Messe” station. Walk along Messestraße and Straße des ersten Mai for about 10 minutes until you reach the place.
General Information

Registration Desk
The Registration Desk is located at the TC Hall, ground fl. TC building
Opening hours:
Mon, 22 Aug 2022; 08.00 – 16.00   Tue, 23 Aug 2022; 08.00 – 16.00
Wed, 24 Aug 2022; 08.00 – 14.00

Coffee Breaks & Lunches
Coffee Break and Lunches will be served at the FORUM, LC building during the conference days.
- Morning Coffee Break between 10.00 – 10.30 (except on Monday, 10.30 – 11.00)
- Lunch at 12.30 – 13.30
- Afternoon Coffee Break at 15.00 – 15.30
The ID badge serves as entrance ticket. Please always wear/bring your ID badge throughout the conference programs, coffee breaks and lunches.

Smoking Policy
Smoking only permitted in the restricted area and outside the building. No smoking inside the buildings.

Mobile Phone Courtesy
All mobile phones and other equipment with audible alarms should be turned off in all sessions as a courtesy to the presenters and to the other attendees.

Presentation Equipment
The conference organizer will provide a standard presentation equipment i.e. computer, projector and flipchart. All presenters are recommended to bring their personal laptop or usb flash drive for presentation including any adaptors required for the laptop, otherwise please inform the organizer earlier before presentation schedule.

WLAN Access
Free WiFi is available in the entire campus by using “eduroam” access. Access vouchers for the guest WLAN (WU-Conference) will be found in your conference bag.

Electricity Supply
Electricity in Austria is supplied at 220V. Please make sure to bring your own travel adapter if needed. We cannot guarantee the availability of the appropriate adaptor or transformer.
Public transport in Vienna

Commuting within Vienna City is very easy. Pedestrian ways are available almost in every streets and parks. Public transportations connecting the suburb to the city central (“Zentrum”). Tickets are available at the ticket vending machines of Wiener Linien network available at most underground stations. Single trip costs € 2.40. Apart from single tickets there are tickets for longer periods of time and are available for 24 hours and 72 hours, or as weekly, monthly or annual passes.

- Information about the city of Vienna can be found at https://www.wien.info/en