

ADBIS Workshops and Doctoral Consortium Program

This is a preliminary program. Changes might still occur.

Sunday, 8 September 2019 – ADBIS Workshops and Doctoral Consortium				
8:30-12:00	Registration <i>Hotel Park Lobby</i>			
9:15-10:30	Opening and keynote Keynote: Muhamed Turkanović: Databases meet blocks, ledgers and contracts Chair: Tatjana Welzer, Aida Kamišalić Latifić <i>Room: Cankar</i>			
10:30-11:00	Coffee break			
11:00-12:30	M2P workshop <i>Room: Cankar</i>	MADEISD workshop <i>Room: Prešeren 1</i>	SemDB+SIMPDA workshops <i>Room: Prešeren 2</i>	DOCTORAL CONSORTIUM <i>Room: Kosovel</i>
	Usage Models Mapped to Programs <i>András J. Molnár and Bernhard Thalheim</i>	Customer value prediction in direct marketing using hybrid support vector machine rule extraction method <i>Sunčica Rogić and Ljiljana Kaščelan</i>	Using Rule and Goal Based Agents to Create Metadata Profiles <i>Hiba Khalid, Esteban Zimányi</i>	Algorithms and Architecture for Managing Evolving ETL Workflows <i>Judith Awiti</i>
	Phenomenological Framework for Model Enabled Enterprise Information Systems <i>Tomas Jonsson and Håkan Enquist</i>	Crowd counting à la Bourdieu <i>Karolina Przybyłek and Illia Shkroba</i>	On Metadata Support for Integrating Evolving Heterogeneous Data Sources <i>Darja Solodovnikova, Laila Niedrite, and Aivars Niedritis</i>	Data Integration of Legacy ERP System based on Ontology Learning from SQL Scripts <i>Chuangtao Ma</i>
Query-Based Reverse Engineering of Graph Databases – From Program to Model <i>Isabelle Comyn-Wattiau and Jacky Akoka</i>	A holistic decision making framework for vehicle sharing systems <i>Selin Ataç, Nikola Obrenović and Michel Bierlaire</i>	The Impact of Event Log Subset Selection on the Performance of Process Discovery Algorithms <i>Mohammadreza Fani Sani, Sebastiaan J. van Zelst, and Wil M.P. van der Aalst</i>		
12:30-13:30	Lunch			
13:30-15:00	M2P workshop <i>Room: Cankar</i>	MADEISD workshop <i>Room: Prešeren 1</i>	SemDB+SIMPDA workshops <i>Room: Prešeren 2</i>	DOCTORAL CONSORTIUM <i>Room: Kosovel</i>
	A Model-Driven Needs Based Augmented Reality: From Model to Program <i>Manal A. Yahya and Ajantha Dahanayake</i>	Residual MobileNets <i>Adam Brzeski, Kamil Grinholc, Kamil Nowodworski and Adam Przybyłek</i>	Exploiting Event Log Event Attributes in RNN Based Prediction <i>Markku Hinkka, Teemu Lehto, and Keijo Heljanko</i>	Business Intelligence & Analytics applied to Public Housing <i>Étienne Scholly</i>
	Graphical E-Commerce Values Filtering Model in Spatial Database Framework <i>Michal Kopecky and Peter Vojtas</i>	A Blockchain-based Decentralized Self-balancing Architecture for the Web of Things <i>Aleksandar Tošić, Jernej Vičič and Michael Mrissa</i>	Design and Implementation of a Graph-based Solution for Tracking Manufacturing Products <i>Jorge Martinez-Gil, Reinhard Stumpner, Christian Lettner, Mario Pichler, Werner Fragner</i>	Textual Data Analysis from Data Lakes <i>Pegdwendé N. Sawadogo</i>


	Transforming object-oriented model to a web interface using XSLT <i>Jiri Musto and Ajantha Dahanayake</i>			A dockerized string analysis workflow for Big Data <i>Maria Th. Kotouza, Fotis E. Psomopoulos, Pericles A. Mitkas</i>
15:00-15:30	Coffee break			
	M2P workshop <i>Room: Cankar</i>	MADEISD workshop <i>Room: Prešeren 1</i>	QAUCA workshops <i>Room: Prešeren 2</i>	BBIGAP workshop <i>Room: Kosovel</i>
	Abstract Layers and Generic Elements as a Basis for Expressing Multidimensional Software Knowledge <i>Valentino Vranić and Adam Neupauer</i>	A Business Context-Based Approach for Message Standards Use – A Validation Study <i>Elena Jelisić, Nenad Ivezić, Boonserm Kulvatunyou, Nenad Anicic and Zoran Marjanovic</i>	Invited talk: <i>Oscar Romero: Analytical Metadata Modeling</i>	An XML Interchange Format for ETL Models <i>Judith Awiti, Esteban Zimányi</i>
15:30-17:00	Model Suite and Model Set In Software Development <i>Igor Fiodorov and Alexander Sotnikov</i>	A Two-Tiered Database Design Based on Core Components Methodology <i>Elena Jelisić, Nenad Ivezić, Boonserm Kulvatunyou, Marija Jankovic and Zoran Marjanovic</i>	Data Quality Alerting Model for Big Data Analytics <i>Eliza Gyulgyulyan, Julien Aligon, Franck Ravat, Hrachya Astsatryan</i>	Metadata Systems for Data Lakes: Models and Features <i>Pegdwendé N. Sawadogo, Étienne Scholly, Cécile Favre, Éric Ferey, Sabine Loudcher and Jérôme Darmont</i>
			Framework for Assessing the Smartness Maturity Level of Villages <i>Jorge Martinez-Gil, Mario Pichler, Tina Beranič, Lucija Brezočnik, Muhamed Turkanovic, Gianluca Lentini, Francesca Polettini, Alessandro Lue, Alberto Colorni Vitale, Guillaume Doukhan, Claire Belet</i>	A Metadata Framework for Data Lagoons <i>Vasileios Theodorou, Rihan Hai and Christoph Quix</i>
17:00-17:30	Coffee break			
	M2P workshop <i>Room: Cankar</i>		QAUCA workshops <i>Room: Prešeren 2</i>	BBIGAP workshop <i>Room: Kosovel</i>
17:30-18:30	Automatic Code Generator for Screen Based Systems <i>Katerina Korenblat and Elena V. Ravve</i>		GameRecs: Video Games Group Recommendations <i>Rama Hannula, Aapo Nikkilä, Kostas Stefanidis</i>	Assessing the Role of Temporal Information in Modelling Short-term Air Pollution Effects Based on Traffic and Meteorological Conditions: A Case Study in Wroclaw <i>Andrea Brunello, Joanna Kaminska, Enrico Marzano, Angelo Montanari, Guido Sciavicco and Tomasz Turek</i>
	Formalizing Requirement Specifications for Problem Solving in a Research Domain <i>Nikolay A. Skvortsov and Sergey A. Stupnikov</i>		FIFARecs: A Recommender System for FIFA18 <i>Jaka Klancar, Karsten Paulussen and Kostas Stefanidis</i>	Extreme Climate Event Detection through High Volume of Transactional Consumption Data <i>Hugo Alatrasta-Salas, Mauro León-Payano and Miguel Nunez-Del-Prado</i>

ADBIS Conference Program

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Monday, 9 September 2019 – ADBIS Conference		
8:00-12:00	<p>Registration <i>Hotel Park Lobby, Ground Floor</i></p>	
9:00-10:30	<p>Opening and keynote Keynote: Goce Trajcevski: <u>Location-in-time data: compression vs. augmentation</u> Chair: Tatjana Welzer, Mirjana Ivanović <i>Room: Cankar, Ground Floor</i></p>	
10:30-11:00	<p>Coffee break</p>	
11:00-12:30	<p>Session: Big Data Chair: Vladimir Zadorozhny <i>Room: Cankar, Ground Floor</i></p>	<p>Session: Document and Text Databases Chair: Jerome Darmont <i>Room: Prešeren, Ground Floor</i></p>
	<p>nativeNDP: Processing Big Data Analytics on Native Storage Nodes <i>Tobias Vincon, Sergey Hardock, Christian Riegger, Andreas Koch and Ilija Petrov</i></p>	<p>Using process mining in real-time to reduce the number of faulty products <i>Zsuzsanna Nagy, Agnes Werner-Stark and Tibor Dulai</i></p>
	<p>Calculating Fourier transforms in SQL <i>Dennis Marten, Holger Meyer and Andreas Heuer</i></p>	<p>Pseudo-Relevance Feedback Based on Locally-Built Co-occurrence Graphs <i>Billel Aklouche, Ibrahim Bounhas and Yahya Slimani</i></p>
	<p>Workload-awareness in a NoSQL-based Triplestore <i>Luiz Henrique Zambom Santana and Ronaldo Mello</i></p>	<p>Document data modeling: A Conceptual Perspective * <i>David Chaves and Elzbieta Malinowski</i></p> <p>Towards automated visualisation of scientific literature * <i>Evelina Di Corso, Stefano Proto, Tania Cerquitelli and Silvia Chiusano</i></p>
12:30-13:30	<p>Lunch</p>	
13:30-15:00	<p>Session: Machine Learning and Data Mining Chair: Robert Wrembel <i>Room: Cankar, Ground Floor</i></p>	<p>Session: Novel applications Chair: Aida Kamišalić Latifić <i>Room: Prešeren, Ground Floor</i></p>
	<p>ILIME: Local and Global Interpretable Model-Agnostic Explainer of Black-Box Decision <i>Radwa ElShawi, Youssef Sherif, Mouaz Al-Mallah, and Sherif Sakr</i></p>	<p>Finding Synonymous Attributes in Evolving Wikipedia Infoboxes <i>Paolo Sottovia, Matteo Paganelli, Francesco Guerra and Yannis Velegrakis</i></p>
	<p>Heterogeneous Committee-Based Active Learning for Entity Resolution (HeALER) <i>Xiao Chen, Yinlong Xu, David Broneske, Gabriel Campero Durand, Roman Zoun and Gunter Saake</i></p>	<p>Web-Navigation Skill Assessment through Eye-Tracking Data <i>Patrik Hlaváč, Jakub Simko and Maria Bielikova</i></p>
	<p>Automated Vertical Partitioning with Deep Reinforcement Learning * <i>Gabriel Campero Durand, Rufat Piriye, Marcus Pinnecke, David Broneske, Balasubramanian Gurumurthy and Gunter Saake</i></p>	<p>The agents' selection methods for a consensus-based investment strategy in a multi-agent financial decisions support system * <i>Marcin Pietranik, Adrianna Kozierekiewicz and Marcin Hernes</i></p>
	<p>Distributed Computation of Top-k Degrees in Hidden Bipartite Graphs *</p>	<p>Ratings vs. Reviews in Recommender Systems: A Case study on the Amazon Movies Dataset *</p>

	<i>Panagiotis Kostoglou, Apostolos N. Papadopoulos and Yannis Manolopoulos</i>	<i>Maria Stratigi, Xiaozhou Li, Kostas Stefanidis and Zheyang Zhang</i>
15:00-15:30	Coffee break	
15:30-16:45	Session: Data Models Chair: Johann Eder <i>Room: Cankar, Ground Floor</i>	Session: Optimization Chair: Ester Zumpano <i>Room: Prešeren, Ground Floor</i>
	Keys in Relational Databases with Nulls and Bounded Domains <i>Munqath Alattar and Attila Sali</i>	You have the Choice: The Borda Voting Rule for Clustering Recommendations <i>Johannes Kastner and Markus Endres</i>
	Metadata management for data lakes * <i>Franck Ravat and Yan Zhao</i>	BM-index: Balanced Metric Space Index based on Weighted Voronoi Partitioning <i>Matej Antol and Vlastislav Dohnal</i>
	Correlation between students' background and the knowledge on Conceptual Database Modelling * <i>Lili Nemeč Zlatolas, Aida Kamišalić and Muhamed Turkanović</i>	Automatically Configuring Parallelism for Hybrid Layouts * <i>Rana Faisal Munir, Alberto Abelló, Oscar Romero, Maik Thiele and Wolfgang Lehner</i>
Smart Caching for Efficient Functional Dependency Discovery * <i>Anastasia Birillo and Nikita Bobrov</i>		
19:00-21:00	Welcome reception <i>The Park Café</i>	
Tuesday, 10 September 2019 – ADBIS Conference		
8:00-10:00	Registration <i>Hotel Park Lobby, Ground Floor</i>	
9:00-10:00	Keynote: Abdelkader Hameurlain: Evolution of Data Management Systems: State of the Art and Open Issues Chair: Aida Kamišalić Latifić <i>Room: Cankar, Ground Floor</i>	
10:00-11:00	Session: Data Warehouses Chair: Marko Hölbl <i>Room: Cankar, Ground Floor</i>	Session: Process Mining and Stream Processing Chair: Marek Wojciechowski <i>Room: Prešeren, Ground Floor</i>
	A framework for learning cell interestingness from cube explorations <i>Patrick Marcel, Verónika Peralta and Panos Vassiliadis</i>	Accurate and Transparent Path Prediction Using Process Mining <i>Gaël Bernard and Periklis Andritsos</i>
	Data Reduction in Multifunction OLAP <i>Ali Hassan and Patrice Darmon</i>	Contextual and Behavioral Customer Journey Discovery using a Genetic Approach <i>Gaël Bernard and Periklis Andritsos</i>
11:00-11:30	Coffee break	
11:30-12:30	Session: Data Warehouses Chair: Marko Hölbl <i>Room: Cankar, Ground Floor</i>	Session: Stream Processing Chair: Yannis Manolopoulos <i>Room: Prešeren, Ground Floor</i>
	Towards a Cost Model to Optimize User-Defined Functions in an ETL Workflow Based on User-Defined Performance Metrics <i>Syed Muhammad Fawad Ali and Robert Wrembel</i>	Adaptive Partitioning and Order-Preserved Merging of Data Streams <i>Constantin Pohl and Kai-Uwe Sattler</i>

	<p>Modelling and Querying Star and Snowflake Warehouses using Graph Databases *</p> <p><i>Alejandro Vaisman, Florencia Besteiro and Maximiliano Valverde</i></p>	<p>BrainFlux: An Integrated Data Warehousing Infrastructure for Dynamic Health Data *</p> <p><i>Jonathan Elmer, Quan Zhou, Yichi Zhang, Fan Yang and Vladimir Zadorozhny</i></p>
	<p>Towards integrating collaborative filtering in visual data exploration systems *</p> <p><i>Housseem Ben Lahmar and Melanie Herschel</i></p>	<p>Solution Pattern for Anomaly Detection in Financial Data Streams *</p> <p><i>Maciej Zakrzewicz, Marek Wojciechowski and Pawel Glawinski</i></p>
12:30-13:30	Lunch	
	<p>Session: Ontologies and Knowledge Management Chair: Oscar Romero <i>Room: Cankar, Ground Floor</i></p>	<p>Session: Theoretical Foundation and New Requirements Chair: Sherif Sakr <i>Room: Prešeren, Ground Floor</i></p>
	<p>Updating ontology alignment on the concept level based on ontology evolution</p> <p><i>Marcin Hernes, Adrianna Kozierkiewicz and Marcin Pietranik</i></p>	<p>ProSA – Using the CHASE for Provenance Management</p> <p><i>Tanja Auge and Andreas Heuer</i></p>
13:30-15:00	<p>On the Application of Ontological Patterns for Conceptual Modeling in Multidimensional Models</p> <p><i>Glenda Amaral and Giancarlo Guizzardi</i></p>	<p>Transaction Isolation in Mixed-Level and Mixed-Scope Settings</p> <p><i>Stephen Hegner</i></p>
	<p>Exploring Pattern Mining for Solving the Ontology Matching Problem *</p> <p><i>Hiba Belhadi, Karima Akli-Astouati, Youcef Djenouri and Jerry Chun-Wei Lin</i></p>	<p>ECHOES: A Fail-safe, Conflict Handling, and Scalable Data Management Mechanism for the Internet of Things</p> <p><i>Christoph Stach and Bernhard Mitschang</i></p>
	<p>Systematic Creation of Cumulative Design Science Research Knowledge with Case Study in the Field of Automatic Speech Recognition *</p> <p><i>Udo Bub</i></p>	
16:00-19:00	<p>Bled castle visit</p> 	
20:00-00:00	<p>Conference dinner <i>Restaurant Panorama</i></p>	
<p>Wednesday, 11 September 2019 – ADBIS Conference</p>		
8:00-10:00	<p>Registration <i>Hotel Park Lobby, Ground Floor</i></p>	

9:00-10:00	<p align="center">Keynote: Nada Lavrač: Relational and Semantic Data Mining Chair: Vili Podgorelec Room: Cankar, Ground Floor</p>
10:00-10:30	<p>Coffee break</p>
10:30-12:00	<p align="center">Session: Data Mining Chair: Vili Podgorelec Room: Cankar, Ground Floor</p>
	<p>Unsupervised Artificial Neural Networks for Outlier Detection in High-Dimensional Data <i>Daniel Popovic, Edouard Fouché and Klemens Böhm</i></p>
	<p>Improving Data Reduction by Merging Prototypes <i>Pavlos Panos, Stefanos Ougiaroglou and Georgios Evangelidis</i></p>
	<p>Applying Differential Evolution with Threshold Mechanism for Feature Selection on a Phishing Websites Classification * <i>Lucija Brezočnik, Iztok Fister Jr. and Grega Vrbančič</i></p>
12:00-13:00	<p>Lunch</p>
13:00-14:30	<p align="center">Session: Data Quality Chair: Tatjana Welzer Room: Cankar, Ground Floor</p>
	<p>CrowdED and CREX : Towards Easy Crowdsourcing Quality Control Evaluation <i>Tarek Awwad, Nadia Bennani, Veronika Rehn-Sonigo, Lionel Brunie and Harald Kosch</i></p>
	<p>Query-oriented answer imputation for aggregate queries <i>Fatma-Zohra Hannou, Bernd Amann and Mohamed-Amine Baazizi</i></p>
	<p>SLFTD: A Subjective Logic based Framework for Truth Discovery * <i>Danchen Zhang, Vladimir Zadorozhny and Vladimir Oleshchuk</i></p>
	<p>A cellular network database for fingerprint positioning systems * <i>Donatella Gubiani, Paolo Gallo, Andrea Viel, Andrea Dalla Torre and Angelo Montanari</i></p>
14:30-15:00	<p align="center">Closing of the conference Chair: Tatjana Welzer Room: Cankar, Ground Floor</p>

* Short papers are marked with (*) and the presenters will have 15 minutes time in the time slot available. The long papers will have 30 minutes time. This time slot include the minutes for discussion.