

IEEE BigData 2023 Program Schedule

Sorrento, Italy

Conference time zone: Central European Standard Time

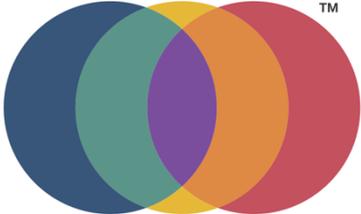
The link to download the Bigdata 2023 conference proceedings for BigData23 and access the prerecorded videos is:

<https://events.rdmobile.com/Events/Details/17264>

If you need the email login information to access the conference proceedings site, pls email Stephen Woods swoods@computer.org,

Meeting Room	Floor
Sirene Foyer	Floor C
L'Alba	Floor C
Orione Speaker ready room	Floor C
Auditorium Sirene	Floor C
Ravello	Floor A
Auditorium Ulisse	Floor A
Auditorium Tritone	Floor A
Nettuno 1	Floor C
Nettuno 2	Floor C
Nettuno 3	Floor C
Nettuno 4	Floor C
Nettuno 5	Floor C
Nettuno 6	Floor C
Capri	Floor A
Amalfi	Floor A
Stampa	Floor A
Positano	Floor A
Pompei	Floor 2
Boardroom 3	Floor A
Boardroom 6	Floor A
Boardroom 2	Floor A
Boardroom 5	Floor A
Boardroom 1	Floor A
Boardroom 2	Floor A
Boardroom 4	Floor A

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Table of Contents

IEEE Big Data 2023 Program Schedule	5
Main Conference Paper Sessions	17
Industry and Government Program Sessions	27
Workshops	33
<i>4th International Workshop on User Understanding from Big Data</i>	34
<i>9th International Workshop on Methods to Improve Big Data Science Projects</i>	35
<i>The 6th International Workshop on Big Data Engineering and Analytics in Cyber-Physical Systems (BigEACPS'23)</i>	35
<i>7th International Workshop on Applications of Big Data Technology in the Transport Industry</i>	35
<i>Workshop 8th Workshop on Real-time Stream Analytics, Stream Mining, CER/CEP & Stream Data Management in Big Data</i>	36
<i>The 7th Annual Workshop on Applications of Artificial Intelligence in the Legal Industry</i>	37
<i>3rd Workshop on Knowledge Graphs and Big Data</i>	38
<i>5th Financial Narrative Processing Workshop (FNP 2023)</i>	38
<i>Large-scale Data Utilization in Economics of Information and Management Sciences: Theory, Computation, and Experiment</i>	40
<i>CyberHunt 2023</i>	41
<i>International Workshop on Big Data Analytics for Climate Change</i>	42
<i>First International Workshop on Machine Learning for securing IoT systems using BigData</i>	43
<i>AI and Adaptive Computing for Edge Sensing and Processing</i>	43
<i>BigCyber – 2023</i>	43
<i>7th International Workshop on Big Data Analytics for Cyber Intelligence and Defense (BDA4CID)</i>	45
<i>2nd International Workshop on Big Data Analytics for Health and Medicine (BDA4HM)</i>	46
<i>3rd International Workshop on Big Data Analytics for Sustainability (BDA4S)</i>	46
<i>BigData Applications for Fights against Crime and Terrorism (DBA4FCT)</i>	47
<i>1st International Workshop on Dataspaces for Digital Twins of Cities Critical Infrastructures (DS4DTCCI)</i>	48
<i>LLM/FM 2023: From Theory to Practice: Workshop on Large Language and Foundation Models</i>	48
<i>IEEE Big Data Workshop on Multimodal Artificial Intelligence (MMAI 2023)</i>	50
<i>1st Workshop on AI Music Generation (AIMG 2023)</i>	51
Special Session	53
<i>9th Special Session on Information Granulation in Data Science and Scalable Computing in conjunction with Big Data Cup Session on</i>	53
<i>Object Recognition with Muon Tomography using Cosmic Rays</i>	53
<i>6th Special Session on HealthCare Data</i>	54

<i>Special Session 7: Understanding New Markets by Data Science, Social Science, and Economics</i>	55
<i>Special Session on Platform for DFFT (Data Free Flow with Trust)</i>	56
<i>Special Session on Social Cognitive Computing in Digital Education and Learning</i>	56
<i>2023 Special Session on Machine Learning on Big Data</i>	57
<i>2023 Special Session on Privacy and Security Big Data</i>	60
<i>9th Special Session on Intelligent Data Mining</i>	61
Big Data Cup Challenges	65
Posters	65
Floor Layout	70
Wi-Fi Network	72

IEEE Big Data 2023 Program Schedule

Sorrento, Italy
December 15 - December 18, 2023

Keynote Lecture: **60 minutes** (about 45 minutes for talk and 15 minutes for Q and A)
Main conference regular paper: **25 minutes** (about 20 minutes for talk and 5 minutes for Q and A)
Main conference short paper: **15 minutes** (about 11 minutes for talk and 4 minutes for Q and A)

All conference activities take place in person at Sorrento, Italy.

Registration: Dec 14 15:00-18:00PM (Sirene Foyer)

Day 1: Friday, December 15, 2023			
Time	Location	Workshops, Special Sessions, Tutorials, Big Data Cup Challenges	Chair
7:15-17:00	Sirene Foyer	Registration	
10-10:20	Sirene Foyer	Coffee Break	
8:00-1:00PM	Ravello	The 5th Financial Narrative Processing Workshop (FNP 2023)	Mo El-Haj, Mo El-Haj, Houda Bouamor, Paul Rayson, Antonio Moreno-Sandoval, Dominique Mariko, Juyeon KANG, Blanca Carbajo Coronado, Ismail El Maarouf, and Doaa Samy m.elhaj@lancaster.ac.uk>
8:00-12:30	Auditorium Ulisse	7th International Workshop on Big Data Analytics for Cyber Intelligence and Defense (BDA4CID)	Stephen McGough, Amir Atapour Abarghouei, and David Wall <stephen.mcgough@n ewcastle.ac.uk>
8:00-12:30	Auditorium Tritone	BFNDMA 2023 (Big Food, Nutrition, and Environment Data Management and Analysis)	Barbara Koroušić Seljak, Tome Eftimov, Gjorgjina Cenikj, Gordana Ispirova, Jovana Dobreva, Riste Stojanov, Giulia Menichetti, Yunpeng Li, tome.eftimov@ijs.si
8:00-12:30	Nettuno 1	The Sixth Workshop on Big Data for Economic and Business Forecasting	Wei Shang and Wei xu, shangwei@amss.ac.cn

10:00_12:00	Nettuno 2	Tutorial: Robust Neural Networks: Explainability, Uncertainty, and Intervenability"	Ghassan AlRegib and Mohit Prabhushankar
8:00—12:30	Nettuno 3	The 3rd International Workshop on Multi-Modal Medical Data Analysis (MMDA)	Wendong Wang, Bo Zhang, Ji Wu, Xiangling Fu, Nanfang Xu, Zhenxiang Gao, Zheng Song, Xiuzhuang Zhou, Zheng Zhang, Hui Gao, Lingjun Zhang, Yue Mi, Jingyun Wu, Haiwen Huang, and Wu Liu, zbo@bupt.edu.cn
8:00—12:30	Nettuno 4	IEEE Workshop on Big Data Analytics in Healthcare	Alex MH Kuo, Juan C. Trujillo, Matteo Mantovani, and Eliana Pastor, akuo@uvic.ca
8:00—12:30	Nettuno 5	KGBigData (The 3rd Workshop on Knowledge Graphs and Big Data)	Yuan An, Jane Greenberg, Alex Kalinowski, and Yuan Ling, ya45@drexel.edu
8:00-12:30	Nettuno 6	AI and Adaptive Computing for Edge Sensing and Processing	Michael Barton, Virginia To, Venkat Dasari, Brian Panneton, and Simon Su, michael.barton@parsons.com
8:00-12:30	Capri	1st International Workshop on Dataspaces for Digital Twins of Cities Critical Infrastructures (DS4DTCCI)	Antonella Longo and Marco Zappatore, marcosalvatore.zappatore@unisalento.it
8:00-14:30	Amalfi	From Theory to Practice: Workshop on Large Language and Foundation Models	Dhaval Patel, Sameep Mehta, Yikang Shen, Carlos Costa, BRADLEY ECK, Cristiano Malossi, KAOUTAR EL MAGHRAOUI, Rafet Sifa and Chandra Ready, pateldha@us.ibm.com
8:00-12:30	Stampa	2023 IEEE BIGDATA Workshop on Data Centric AI	Yanjie Fu, Kunpeng Liu, and Hui Xiong, yanjie.fu@ucf.edu
8:00-12:30	Boardroom 6	The Fourth International Workshop on Big Data Reduction (IWBDR-4)	Kai Zhao, Sian Jin, and Jieyang Chen, kzhaoy@uab.edu

12:30-14:00	Lunch (at your own)		
16:00-16:20	Sirene Foyer	Coffee Break	
8:00 – 14:00	Boardroom 3	9 th Special Session on Information Granulation in Data Science and Scalable Computing in conjunction with Big Data Cup Session on Object Recognition with Muon Tomography using Cosmic Rays	Dominik Ślęzak <dominik.slezak@qed.pl>
14:00 – 18:30	Auditorium Ulisse	International Workshop on Data Engineering and Modeling for AI (DEMAI)	Carlos Ordonez and Ladjel Bellatreche <carlos@Central.UH.EDU>
14:00 – 18:30	Auditorium Tritone	2nd International Workshop on Big Data Analytics for Health and Medicine (BDA4HM)	Stephen McGough, Amir Atapour Abarghouei, and Matthew Forshaw <stephen.mcgough@newcastle.ac.uk>
14:00 – 18:30	Nettuno 1	The Seventh Annual Workshop on Applications of Artificial Intelligence in the Legal Industry	Han Qin, Jianping Zhang, Nathaniel Huber-Fliflet, Adam Dabrowski, and Jingchao Yang
14:00-18:30	Online	The 7th Workshop on Graph Techniques for Adversarial Activity Analytics (GTA3) https://ucla.zoom.us/j/97386726115?pwd=YUhQbitpeGdJV1hHcUNTswxJMwZUZz09 Meeting ID: 973 8672 6115 Passcode: 827395	Jiejun Xu and Hanghang Tong, jxu@hrl.com
14:00-18:30	Nettuno 3	BigData Applications for Fight Against Crime and Terrorism (BDA4FCT)	Georgios Stavropoulos and Konstantinos Votis, stavrop@iti.gr
14:00-18:30	Nettuno 5	8th Workshop on Real-time Stream Analytics, Stream Mining, CER/CEP & Stream Data Management in Big Data	Sabri Skhiri, Albert Bifet, and Alessandro Margara, sabri.skhiri@euranova.eu
14:00-18:30	Nettuno 6	9th International Workshop on Methods to Improve Big Data Science Projects	Jeffrey Saltz, jsaltz@syr.edu
14:00-16:00	Capri	Tutorial: Big Data Analytics in Fraud Detection and Churn Prevention: from Prediction to Causal Inference	Gianluca Bontempi
16:00-18:00	Amalfi	Tutorial: Data and Model Lifecycle Management for Incremental Machine Learning Algorithms	Seshu Tirupathi and Dhaval Salwala

13:30:00-18:30	Online	The 6th International Workshop on “Big Data Engineering and Analytics in Cyber-Physical Systems” (BigEACPS’23) Join Zoom Meeting https://texastech.zoom.us/j/91739586385?pwd=S296dkdWSHJ6MklEdmZ1SGFxeiswZz09 Meeting ID: 917 3958 6385 Passcode: 163898	Akbar Namin, akbar.namin@ttu.edu
14:00-18:30	Boardroom 6	International Workshop on Big Data Analytics for Climate Change	Praveen Kumar <praveen_2221cs11@iitp.ac.in>
15:00-16:40	Boardroom 3	Industry & Government S1	Dominik Ślęzak
16:50-18:30	Boardroom 3	Industry & Government S2	Hosub Lee
14:00-18:00	Stampa	The Third International Workshop on Data Science for Equality, Inclusion, and Wellbeing Challenges https://cnrs.zoom.us/j/97155970838?pwd=VWxpM0dPckd2TFc0eFY3NmNRQ21SUT09 Passcode: Kj950p	Tania Cerquitelli

Day 2: Saturday, December 16, 2023		
8:00-17:00	Registration (Sirene Foyer)	
8:40-9:15	Opening Ceremony Conference Chairs: Alfredo Cuzzocrea (University of Calabria, Italy), Rakesh Agrawal (Data Insights Laboratories, USA) PC Chairs: Jingrui He (University of Illinois Urbana-Champaign, USA), Themis Palpanas (Université Paris Cité, France), Wei Wang (Hong Kong University of Science and Technology, China); I&G Chairs: Dejing Dou (BCG X, China) Dominik Slezak (QED Software , Poland) Steering Committee Chair: Hu,Xiaohua Tony xh29@drexel.edu Location: Auditorium Sirene	
9:15 -10:15	Keynote Speech 1 Stanford W. Ascherman Professor of Engineering (Emeritus), Jeffrey Ullman Stanford University, USA Big-Data Algorithms That Are Not Machine Learning Chair: Alfredo Cuzzocrea Location: Auditorium Sirene	
10:15-10:30	Sirene Foyer	Coffee Break

10:00-12:30	Sirene Foyer	Poster Setup	
Time	Location	Sessions/Workshops	Session chair
10:30 – 12:30	Auditorium Ulisse	S1: Computational Models I	Shiaofen Fang
10:30 – 12:30	Auditorium Tritone	S2: Machine Learning Algorithms I	Davide Tosi
10:30 – 12:30	Nettuno 1	S3: Deep Learning I	Venkat Dasari
10:30 – 12:30	Nettuno 4	S4: Feature Representation Learning	Mahmoud ELBATTAH
10:30 – 12:30	Nettuno 2	S5: Mobility	Mohit Prabhushankar
10:30 – 12:30	Nettuno 6	S6: Time Series and SpatioTemporal	Savong Bou
10:30 – 12:30	Nettuno 5	Industry & Government S3	John Wu
10:30 – 12:30	Pompei	Tutorial: With Big Data Comes Big Compute: Scaling Machine Learning onto Public and Commercial Clouds with Kubernetes	Grant Scott and J. Alex Hurt
9:00-16:30	Capri	Special Session on Machine Learning on Big Data	Alfredo Cuzzocrea
8:00-19:00	Ravello	9 th Special Session on Intelligent Data Mining	Uraz Yavanoglu <urazyavanoglu@gmail.com>; <uraz@gazi.edu.tr>
8:00-18:00	Nettuno 3	Workshop on Multimodal AI (MMAI 2023)	Duoduo Liao, dliao2@gmu.edu
9:00-18:00	Amalfi	Special Session on Social Cognitive Computing in Digital Education and Learning, Data-Driven Designation and Implementation of Automated Guided Vehicles	Jerry Chun-Wei Lin <jerrylin@ieee.org>
9:00-18:00	Boardroom 3	6th Special Session on HealthCare	Ozgun PINARER <opinarer@gsu.edu.tr> SULTAN N. TURHAN <sturhan@gsu.edu.tr>
8:30-12:30	Boardroom 6	Special Session: Understanding New Markets by Data Science, Social Science, and Economics	Teruaki Hayashi <hayashi@sys.t.u-tokyo.ac.jp>
10:30 – 12:30	Stampa	Tutorial: Contrastive learning: Big Data Foundations and Applications	Sandhya Tripathi and Christopher R King
12:30 – 14:00	Lunch (provided by conference) Location: L'Alba		
14:00 – 16:00	Auditorium Ulisse	S7: Computational Models II	Pinar Karagoz

14:00 – 16:00	Auditorium Tritone	S8: Machine Learning Algorithms II	Syed Attique Shah
14:00 – 16:00	Auditorium Sirene	S9: Deep Learning II	Ravi Kaler
14:00 – 16:00	Nettuno 4	S10: Dimension Reduction	Michael Kirby
14:00 – 16:00	Nettuno 2	S11: Demographics and Society	Stefano Fiorini
14:00 – 16:00	Nettuno 6	S12: Software Techniques, Architectures, and Open Platforms	Shiva Jahangiri
14:00 – 16:00	Nettuno 5	Industry and Government S4	Dejing Dou
14:00 – 16:00	Pompei	Tutorial: "Green Analytics"	Ladjel Bellatreche, Wojciech Macyna, and Carlos Ordonez <carlos@Central.UH.EDU >
14:00 – 18:00	Stampa	Large-scale Data Utilization in Economics of Information and Management Sciences: Theory, Computation, and Experiment	Naoki Watanabe, Kazuhito Ogawa, and Satoshi Takahashi <naoki50@keio.jp>
14:00 – 18:00	Boardroom 6	3rd International Workshop on Big Data Analytics for Sustainability (BDA4S)	Stephen McGough, Matthew Forshaw, Gavin Shaddick, and Leye Wang <stephen.mcgough@newcastle.ac.uk>
14:00 – 18:00	Nettuno 1	6th Workshop on Big Data for Cybersecurity (BigCyber-2023)	Karuna Pande Joshi, Sudip Mittal, Rajeev Agrawal, and Lavanya Elluri, kjoshi1@umbc.edu
14:00 – 18:00	Positano	BigData Cup Challenge Keystroke Verification Challenge (KVC)	Giuseppe Stragapede giuseppe.stragapede@uam.es, Ruben Vera Rodriguez <ruben.vera@uam.es>; Ruben Tolosana Moranchel ruben.tolosana@uam.es zoumbatianos@gmail.com
14:00-18:30	Boardroom 2	First International Workshop on Machine Learning for securing IoT systems using BigData	Cristian Bucur, Cristian Balan, and Zareef Mohammed, bucurc@gmail.com
16:00-16:30	Sirene Foyer	Coffee Break	

16:00-16:30	Sirene Foyer	Poster Diaplsy
16:30 – 17:30	<p align="center">Keynote Speech 2 Professor, Minos Garofalakis Technical University of Crete, Greece Have your data and share it too: Private data analytics at scale Chair: Alfredo Cuzzocrea Location: Auditorium Sirene</p>	
17:30-17:50	<p align="center">IEEEDataPort Melissa Handa Senior Program Manager</p> <p>Learn about IEEE's comprehensive data platform that enables all researchers to efficiently store, share, access, and manage research data, accelerating their research efforts. It is free for any user to publish up to 2TB of data on the platform and get a free DOI.</p> <p align="center">Chair: Xiaohua Hu Location: Auditorium Sirene</p>	

Day 3: Sunday, December 17, 2023

8:30-17:00	Registration (Sirene Foyer)		
9:00 – 10: 00	Keynote Speech 3 Professor, Qiong Luo HKUST and HKUST (Guangzhou), China GPU Acceleration for Data Processing and Analytics Chair: Dejing Dou Location: Auditorium Sirene		
10: 00-10:30	Sirene Foyer	Coffee Break	
10: 00-10:30	Sirene Foyer	Poster Display	
Time	Location	Sessions/Workshops	Session chair
10:30 – 12:30	Auditorium Ulisse	S13: Computational Models III	Graziela Figueredo
10:30 – 12:30	Auditorium Tritone	S14: Machine Learning Algorithms III	Alex Shtoff
10:30 – 12:30	Nettuno 1	S15: Deep Learning IV	Roberto Corizzo
10:30 – 12:30	Nettuno 4	S16: Physics Informed Learning and Visualization	Hasan Kurban
10:30 – 12:30	Nettuno 2	S17: Vision and Visualization	Lindi Liao
10:30 – 12:30	Nettuno 6	S18: Recommendations Systems and Web Mining	Toyotaro Suzumura
10:30 – 12:30	Nettuno 5	Industry and Government S5	Luca Cagliero
8:30 – 12:30	Boardroom 3	4 th International Workshop on User Understanding from Big Data Google Meet joining info Video call link: https://meet.google.com/okb-ttbj-uhj Or dial: (US) +1 402-207-0877 PIN: 765 682 100# More phone numbers: https://tel.meet/okb-ttbj-uhj?pin=8686099287278	Claire Ding and Wutai Wei, weiwutao@gmail.com
8:30-12:30	Ravello	AIDA (AI-Driven Agriculture: opportunities and challenges)	Vijaypal Singh Dhaka, Geeta Rani, Eugenio Vocaturo, and Ester Zumpano, eugenio.vocaturo@cnr.it
8:30 – 12:30	Pompei	7th International Workshop on Applications of Big Data Technology in the Transport Industry	John Easton and Joseph Preece, j.m.easton@bham.ac.uk
9:30-16:30	Capri	Special Session on Privacy and Security Big Data	Alfredo Cuzzocrea
9:00-16:30	Stampa	Special Session on Machine Learning on Big Data	Alfredo Cuzzocrea

9:00-18:30	Boardroom 6	Computational Archival Science: digital records in the age of big data	Mark Hedges, Richard Marciano, Victoria Lemieux, mark.hedges@kcl.ac.uk
8:30-12:30	Amalfi	AI-Powered Renewable Energy Forecasting; Techniques and Challenges (hybrid)	Luciano Caroprese, Sergio Montelpare, Mariano Pierantozzi, and Ester Zumpano, luciano.caroprese@unich.it
10:00-18:00	Positano	Workshop on Cyber Threat Intelligence and Hunting (CyberHunt 2023) Link to join the workshop: https://meet.google.com/zpn-zgbo-wdv	Vasileios Mavroidis, University of Oslo, vasileim@ifi.uio.no Tamas Bisztray, University of Oslo, Manos Athanatos (TUC), <tamasbi@ifi.uio.no>
9:00-12:00	Nettuno 3	6th Special Session on HealthCare	Ozgun PINARER <opinarer@gsu.edu.tr> SULTAN N. TURHAN <sturhan@gsu.edu.tr>
8:00-13:00	Online	11th International Workshop on Distributed Storage and Blockchain Technologies for Big Data #VooV/Tencent Meeting ID : 170-332-263	Hui Li, Hanxu Hou and Han Wang
12:30 – 14:00	Lunch (Provided by the conference) Location: L'Alba)		
14:00 – 16:00	Auditorium Ulisse	S19: Predictive Analytics on Big Data	Saeed Samet
14:00 – 16:00	Auditorium Tritone	S20: Deep Learning V	Ravi Kaler
14:00 – 16:00	Nettuno 1	S21: Data Ecosystem Basics and Vulnerabilities	Craig Knoblock
14:00 – 16:00	Nettuno 4	S22: Trustworthiness, Resilience, Privacy, and Security	Dolores Ordóñez
14:00 – 16:00	Nettuno 2	S23: Fake Information, Personality, and Semantic Understanding	Mo El-Haj
14:00 – 16:00	Nettuno 6	S24: Algorithms and Systems for Big Data Search	Jagdev Bhogal
14:00 – 16:00	Nettuno 5	Industry and Government S6	Ovidiu-Cristian Marcu
14:00 – 18:00	Boardroom 3	Workshop: International Workshop on Data-driven Science for Graphs: Algorithms, Architectures, and Application	Jinli Zhang, Xuemin Lin, and Yongduan Song, lz73798@gmail.com
14:00—16:00	Nettuno 3	Special Session on Platform for DFFT (Data Free Flow with Trust)	Noboru Koshizuka <noboru@koshizuka-lab.org>
14:00-18:00	Ravello	1 st Workshop on AI Music Generation (AIMG 2023)	Callie Liao and Lindi Liao, cliao2025@gmail.com
16: 00-16:30	Sirene Foyer	Coffee Break	

16: 00-16:30	Sirene Foyer	Poster Diaplay
16:30 – 17:30	<p style="text-align: center;">Keynote Speech 4 Regents Professor and William Norris Chair in Large Scale Computing, Vipin Kumar University of Minnesota, USA Knowledge-Guided Machine Learning: A New Framework for Accelerating Scientific Discovery and Addressing Global Environmental Challenges Chair: Xiaohua Tony Hu Location: Auditorium Sirene</p>	
18:00-21:00	<p style="text-align: center;">Banquet Award Ceremony Social Program Location: L'Alba</p>	

Day 4: Monday, December 18, 2023			
8:30-12:00	Registration (Sirene Foyer)		
9:00 - 10: 00	<p align="center">Keynote Speech 5 Professor, Stratos Idreos Harvard University, USA The Data Systems Grammar: Self-designing Systems for the era of AI Chair: Dominik Slezak Location: Auditorium Sirene</p>		
10:00 – 10:30	Sirene Foyer	Coffee Break	
10:00 – 10:30	Sirene Foyer	Poster Display	
Time	Location	Sessions/Workshops	Session chair
10:30 – 12:30	Auditorium Ulisse	S25: Machine Learning Algorithms IV	David Anastasiu
10:30 – 12:30	Auditorium Tritone	S26: Privacy Preserving Analytics	Gautam Srivastava
10:30 – 12:30	Nettuno 1	S27: Deep Learning III	Grant Scott
10:30 – 12:30	Nettuno 4	S28: Data Preprocessing, Data Cleaning, and Data Integration	Jinli Zhang
10:30 – 12:30	Nettuno 2	S29: Cloud/Grid/Stream Computing	Yusuke Tanimura
10:30 – 12:30	Nettuno 6	S30: Link and Graph Mining	Saptarshi Sengupta
10:30 – 12:30	Nettuno 5	Industry and Government S7	Dominik Ślęzak
9:30-16:30	Capri	Special Session on Privacy and Security Big Data	Alfredo Cuzzocrea
9:00-18:00	Pompei	8th Workshop on Advances in High Dimensional (AdHD) Big Data	Aristidis Vrahatis, Sotiris Tasoulis, Nicos Pavlidis, aris.vrahatis@gmail.com
12:30 – 14:00	Lunch (provided by the Conference) Location: L'Alba Poster Display ()		
14:00 – 16;00	Auditorium Ulisse	S31: Machine Learning Algorithms V	Luca Cagliero
14:00 – 16;00	Auditorium Tritone	S32: Deep Learning VI	Grant Scott
14:00 – 16;00	Nettuno 1	S33: Deep Learning VII	Charalampos Chelmiss
14:00 – 16;00	Nettuno 4	S34: Recommendation Systems and Social Media Systems	Abdelmounaam Rezgui
14:00 – 16;00	Nettuno 2	S35: High Performance/Parallel Computing Platforms	Ovidiu Marcu
14:00 – 16;00	Nettuno 6	S36: Semantic-based Data Mining and Mining of Scientific Data	John Easton
14:00 – 16;00	Nettuno 5	Industry and Government S8	Dejing Dou
16:00 - 16: 30	Sirene Foyer	Coffee Break	

Main Conference Paper Sessions

S1: Computational Models I	
BigD477 "Solving Tensor Low Cycle Rank Approximation" (Regular)	Yichuan Deng, Yeqi Gao, and Zhao Song
BigD486 "Mitigating Confounding and Selection Biases in Personalized Recommendation: A Causal Approach" (Regular)	Wen Huang, Jingbo Zhou, Xintao Wu, and Dejing Dou
BigD453 "Vision Paper: Hyperspectral Analysis of Finger Skin for Inherently Resilient and Fair Biometric Systems" (Short)	Emanuela Marasco
BigD599 "Fused Matrix K-means: A Fast K-means Optimization Approach" (Short)	Zizhong Chen, Kaiming Ouyang, and Vincent Tran
BigD722 "Verifying Relational Explanations: A Probabilistic Approach" (Short), Video	Abisha Thapa Magar, Anup Shakya, Somdeb Sarkhel, and Deepak Venugopal
BigD754 "Big Data Management System Architectures: From Opportunities to Challenges [Vision]" (Short) VIDEO	Radhika Joshi, Calvin Dani, and Shiva Jahangiri
S2: Machine Learning Algorithms I	
BigD640 "RoadFormer: Road-Anchored Adversarial Dynamic Graph Transformer for Unlimited-Range Traffic Incident Impact Prediction" (Regular)	Yanshen Sun, Kaiqun Fu, and Chang-Tien Lu
BigD229 "Tripletformer for Probabilistic Interpolation of Irregularly sampled Time Series" (Regular)	Vijaya Krishna Yalavarthi, Johannes Burchert, and Lars Schmidt-Thieme
BigD329 "Interpretable Sock Puppet Attribution" (Regular)	Chun Wei Seah, Chia-Yu Hung, Zhiqiang Hu, Yujia Hu, Hai Leong Chieu, and Roy Ka-Wei Lee
BigD297 "Quantitatively Evaluating the Validity of Contrastive Generators for Recourse" (Short)	Ian Howell, Eleanor Quint, and Hongfeng Yu
BigD350 "A Robust Classifier under Missing-Not-at-Random Sample Selection Bias" (Short)	Huy Mai, Wen Huang, Wei Du, and Xintao Wu
S3: Deep Learning I	
BigD281 "Document-Level Event Argument Extraction Based on Bidirectional Span Detection" (Regular)	Yong Zhang, Feng Xiong, and Kai Zhang
BigD326 "Ultra-wide Band Positioning with Signal Interference based on Two-Stream Residual Network" (Regular)	Xueming Xu, Ruirui Zhao, and Jichao Li
BigD337 "IIP-Transformer: Intra-Inter-Part Transformer for Skeleton-Based Action Recognition" (Regular) VIDEO	Qingtian Wang, Shuze Shi, Jiabin He, Jianlin Peng, Tingxi Liu, and Renliang Weng
BigD251 "Optimal Sampling for Moving Object Trajectory Tracking in Smart Transportation Systems: A Transformer-based Approach" (Short)	Usman Musa, Yifan Guo, Cheng Qian, and Wei Yu
BigD280 "Deep Learning for Spatiotemporal Big Data: Opportunities and Challenges [Vision Paper]" (Short)	Zhe Jiang
BigD287 "Self-Supervision for Tackling Unsupervised Anomaly Detection: Pitfalls and Opportunities [Vision Paper]" (Short)	Leman Akoglu and Jaemin Yoo
S4: Feature Representation Learning	
BigD311 "OrthoNets: Orthogonal Channel Attention Networks" (Regular)	Hadi Salman, Caleb Parks, Matthew Swan, and John Gauch
BigD335 "Unvisited Out-Of-Town POI Recommendation with Simultaneous Learning of Multiple Regions" (Regular)	Rikuto Tsubouchi, Takahiro Hara, Kei Yonekawa, and Shuichiro Haruta
BigD346 "SST: Semantic and Structural Transformers for Hierarchy-aware Language Models in E-commerce" (Regular)	Karan Samel, Houyu Zhang, Jun Ma, Haoming Jiang, Qing Ping, Sheng Wang, Yi Xu, Belinda Zeng, and Trishul Chilimbi

BigD489 "Spatial-Temporal Dynamic Graph Diffusion Convolutional Network for Traffic Flow Forecasting" (Regular)	Yang LI and Yaying ZHANG
BigD697 "Spatial-Temporal Flow Holistic Interaction Graph Convolution Network for Bidirectional Traffic Flow Forecasting" (Short)	Canyang ZHANG, Qi ZHENG, and Yaying ZHANG
S5: Mobility	
BigD745 "On-Street Parking Prediction: A Comparative Study" (Regular)	Stefano Fiorini, Michele Ciavotta, Carlo Liberto, and Gaetano Valenti
BigD774 "M2-CNN: A Macro-Micro Model for Taxi Demand Prediction" (Regular)	Shih-Fen Cheng and Prabod Rathnayaka
BigD231 "ATADA: Adaptive Time Aware Anomaly Detection Approach for Real-Time Intelligent Transportation Systems" (Short)	Ke Zhang, Hengchang Liu, and Siobhan Clarke
BigD331 "MobiSpaces: An Architecture for Energy-Efficient Data Spaces for Mobility Data" (Short)	Christos Doulkeridis, Georgios Santipantakis, Nikolaos Koutroumanis, George Makridis, Vasilis Koukos, George Theodoropoulos, Yannis Theodoridis, Dimosthenis Kyriazis, Pavlos Kranas, Diego Burgos, Ricardo Jimenez-Peris, Mariana Duarte, Mahmoud Sakr, Esteban Zimanyi, Anita Graser, Clemens Heistracher, Kristian Torp, Ioannis Chrysakis, Theofanis Orphanoudakis, Evgenia Kapassa, Marios Touloupou, Juergen Neises, Petros Petrou, Sophia Karagiorgou, Rosario Catelli, Domenico Messina, Marcelo Corrales Compagnucci, and Matteo Falsetta
BigD524 "A Big Data Approach to Augmenting the Huff Model with Road Network and Mobility Data for Store Footfall Prediction" (Short)	Ming Hui Tan, Kar Way Tan, and Hoong Chuin Lau
BigD367 "SASTDGCN: Self-Attention Based Spatial-Temporal Double Graph Convolutional Networks for Traffic Flow Forecasting" (Short)	Jingjia Wan and Yu Wu
S6: Time Series and SpatioTemporal	
BigD427 "Finformer: A Static-dynamic Spatiotemporal Framework for Stock Trend Prediction" (Regular)	Yi Zu, Jiacong Mi, Lingning Song, Shan Lu, and Jieyue He
BigD704 "Circular Arc Length-Based Kernel Matrix For Protein Sequence Classification" (Regular)	Taslim Murad, Sarwan Ali, Prakash Chourasia, Haris Mansoor, and Murray Patterson
BigD228 "Tabular Data to Image Generation: Benchmark Data, Approaches, and Evaluation [Vision Paper]" (Short)	Alex Tang, Gromit Chan, Ryan Rossi, Chang Xiao, and Eunyee Koh
BigD594 "Interpretable Solar Flare Prediction with Sliding Window Multivariate Time Series Forests" (Short) Video	Anli Ji and Berkay Aydin
BigD576 "A Novel Approach for Deep Learning-Powered Forecasting of Market Bottoms in Cryptocurrency and Stock Trading" (Short)	Dulaj Dasanayake, Yasindu Dilshan, Kavishka Rathnaweera, Sapumal Ahangama, and Indika Perera
BigD291 "aQua: A Framework for Spatiotemporal Analysis and Visualizations of Water Quality Data at Scale" (Short)	Matthew Young, Sangmi Pallickara, and Shrideep Pallickara
S7: Computational Models II	
BigD284 "Dynamic Mining Interval to Improve Blockchain Throughput" (Regular)	Hou-Wan Long, Xiongfei Zhao, and Yain-Whar Si
BigD288 "CoMABO: Covariance Matrix Adaptation for Bayesian Optimization" (Regular, Video)	Hsiang-Yu Ku and Che-Rung Lee
BigD371 "Efficiently Mining Frequent Representative Motifs in Large Collections of Time Series" (Regular)	Stijn Rotman, Boris Cule, and Len Feremans

BigD401 "Subspace Interpolation and Indexing on Stiefel and Grassmann Manifolds as a Lightweight Inference Engine" (Regular)	Wenqing Hu, Tiefeng Jiang, Birendra Kathariya, Vikram Abrol, Jiali Zhang, and Zhu Li
BigD321 "Fast Heavy Inner Product Identification Between Weights and Inputs in Neural Network Training" (Short)	Lianke Qin, Saayan Mitra, Zhao Song, Yuanyuan Yang, and Tianyi Zhou
S8: Machine Learning Algorithms II	
BigD459 "GNN-Ensemble: Towards Random Decision Graph Neural Networks" (Regular)	Wenqi Wei, Mu Qiao, and Divyesh Jadav
BigD476 "Leveraging Large Language Models for Structure Learning in Prompted Weak Supervision" (Regular) Video	Jinyan Su, Peilin Yu, Jieyu Zhang, and Stephen Bach
BigD512 "Integrating Staleness and Shapley Value Consistency for Efficient K-Asynchronous Federated Learning" (Regular)	Yuhui Jiang, Xingjian Lu, Wei Mao, and Ying Lin
BigD525 "An Adaptive Hierarchical Method for Anytime Set-wise Clustering of Variable and High-Speed Data Streams" (Regular)	Aarti ., Jagat Sesh Challa, Utkarsh Darolia, Mridul Chandak, Navneet Goyal, and Poonam Goyal
BigD579 "Exploring Dementia Risk in Cardiovascular Patients Through AI-Enabled Big Data Analysis" (Short)	Shreya Iyer, Graziela Figueredo, Blossom Stephan, Jacob Brain, Mario Siervo, Nadeem Qureshi, Ralph Kwame Akyea, and Stephen Kaptoge
BigD439 "Drift-aware Anomaly Detection for Non-stationary Time Series" (Short) VIDEO	Yang Gao, Ying Li, Yang Li, Zunlei Feng, Mingli Song, Xinyu Wang, and Chun Chen
S9: Deep Learning II	
BigD355 "Label Freedom: Stable Diffusion for Remote Sensing Image Semantic Segmentation Data Generation" (Regular)	Chenbo Zhao, Yoshiki Ogawa, Shenglong Chen, Zhehui Yang, and Yoshihide Sekimoto
BigD424 "Shrinkage Denoising and Sequential State Extraction Model for Vibration Event Recognition" (Regular)	Wanchang Jiang and Yuxin Jiang
BigD426 "Improving Knowledge Distillation for Federated Learning on Non-IID Data" (Regular)	Zongyi Chen, Sanchuan Guo, Liyan Shen, Xi Zhang, and Zhuonan Chang
BigD315 "LogGPT: Log Anomaly Detection via GPT" (Short)	Xiao Han, Shuhan Yuan, and Mohamed Trabelsi
BigD365 "Humor Level Recognition Based on Prompt Learning and Contrastive Learning" (Short)	Shaowu Zhang, Xijun Cui, Tongyue Zhang, Hongfei Lin, and Liang Yang
BigD380 "Transferring Lottery Tickets in Computer Vision Models: a Dynamic Pruning Approach" (Short)	Qisheng He and Ming Dong
S10: Dimension Reduction	
BigD546 "A novel training mechanism for health indicator construction and remaining useful lifetime (RUL) prediction" (Regular)	Hanbyeol Park, Dohee Kim, Minseop Kim, Mingyu Park, Hyerim Bae, and Yunkyung Park
BigD572 "WellFactor: Patient Profiling using Integrative Embedding of Healthcare Data" (Regular)	Dongjin Choi, Andy Xiang, Ozgur Ozturk, Deep Shrestha, Barry Drake, Hamid Haidarian, Faizan Javed, and Haesun Park
BigD351 "CTT: Causally Informed Tensor Train Decomposition" (Short)	Mao-Lin Li, K. Selçuk Candan, and Maria Luisa Sapino
BigD711 "Federated Learning for Sparse Principal Component" (Short)	Sin Cheng Ciou, Pin Jui Chen, Elvin Y. Tseng, and Yuh-Jye Lee
BigD740 "RAXC: Reflexivity-based Approximate Computing techniques for efficient remote sensing" (Short)	Aaditi Kapre, Shruti Kunde, Sparsh Mittal, and Rekha Singhal
S11: Demographics and Society	
BigD412 "Combining Demographic Tabular Data with BERT Outputs for Multilabel Text Classification in Higher Education Survey Data" (Regular)	Kevin Chovanec, John Fields, and Praveen Madiraju

BigD715 "DRLO: Deep Representation Learning for Large Scale Off-track Satellite Remote Sensing Data" (Regular)	Xin Huang, Chenxi Wang, Wenbin Zhang, Sanjay Purushotham, and Jianwu Wang
BigD484 "Fine-Grained Urban Population Distribution Estimation Using Image Super-Resolution Model with Rich Auxiliary Information [Vision Paper]" (Short)	Naoto Takeda, Akihiro Kobayashi, Yudai Yamazaki, and Daisuke Kamisaka
BigD316 "[Vision Paper] Zero-shot Learning with Minimum Instruction to Extract Social Determinants and Family History from Clinical Notes using GPT Model" (Short)	Neel Jitesh Bhate, Ansh Mittal, Zhe He, and Xiao Luo
BigD664 "A Hybrid Method of Sentiment Analysis and Machine Learning Algorithm for the U.S. Presidential Election Forecasting" (Short) Video	Guocheng Feng, Kaihao Chen, Huaiyu Cai, and Zhijian Li
BigD646 "An Interactive Framework of Balancing Evaluation Cost and Prediction Accuracy for Knowledge Tracing" (Short) Video	Weili Sun, Boyu Gao, Jiahao Chen, and Shuyan Huang
S12: Software Techniques, Architectures, and Open Platforms	
BigD666 "User-guided Page Merging for Memory Deduplication in Serverless Systems" (Regular)	Wei Qiu, Marcin Copik, Yun Wang, Alexandru Calotoiu, and Torsten Hoefler
BigD617 "Towards Open World Event Processing (Vision Paper)" (Short)	Edward Curry
BigD609 "Foundational Data Space Models: Bridging the AI and Data Ecosystems [Vision Paper]" (Short)	Edward Curry, Tarek Zaarour, Rafiqul Haque, Mohan Timilsina, and Majjed Al-qatf
BigD580 "Performance of Null Handling in Array Databases" (Short)	Dimitar Mišev, Mikhail Rodionychyev, and Peter Baumann
BigD687 "Accelerating Multilingual Applications with In-memory Array Sharing" (Short)	Masanobu Nozawa, Satoshi Imamura, and Kenji Kon
S13: Computational Models III	
BigD408 "Compact Boundary Matrix from a Polytopal Complex for Computing Persistent Homology" (Regular)	Rohit Singh and Philip Wilsey
BigD466 "Online Adaptive Mahalanobis Distance Estimation" (Regular)	Lianke Qin, Aravind Reddy, and Zhao Song
BigD518 "Time-varying QoS Estimation via Non-negative Latent Factorization of Tensors with Extended Linear Biases" (Regular)	Xiuqin Xu, Mingwei Lin, Wenqiang Li, Jianpeng Zhang, and Hao Wu
BigD294 "Ocean Data Quality Assessment through Outlier Detection-enhanced Active Learning" (Short)	Na Li, Yiyang Qi, Ruyue Xin, and Zhiming Zhao
BigD633 "Quality Ranking for Synthetically Generated Images" (Short)	Bahadır Bilgin, Ali Sekmen, and Guy Sereff
S14: Machine Learning Algorithms III	
BigD529 "RSP-gcForest: A Distributed Deep Forest via Random Sampling Partition" (Regular)	Mark Junjie Li, Wenzhu Cai, Yigang Lin, Sunjie Huang, and Patrick Xiaogang Peng
BigD543 "Unveiling the Road Matrix: Development of Versatile Pavement Surface Models from Low-resolution Aerial Images" (Regular)	Ling-feng Liao, Deeksha Arya, and Yoshihide Sekim
BigD703 "Feature Selection on Big Data using Masked Sparse Bottleneck Centroid-Encode" (Regular)	Tomojit Ghosh and Michael Kirby
BigD712 "Scalable Homology Classification through Decomposed Euler Characteristic Curves" (Regular)	Nicholas Malott and Philip Wilsey
S15: Deep Learning IV	
BigD534 "Hybrid Loss for Hierarchical Multi-label Classification Network" (Regular)	Wenting Qi and Charalampos Chelmiss
BigD555 "Striking a Balance in Fairness for Dynamic Systems Through Reinforcement Learning" (Regular)	Yaowei Hu, Jacob Lear, and Lu Zhang

BigD556 "Multi-Instance Bias Suppression for Enhanced Generalization in Breast Cancer Diagnosis: Harnessing Histopathological Big Data Insights" (Regular)	Syed Attique Shah, Xiaoyang Zeng, Awais Ahmed, Shaheed Parvez, Rui Xi, and Mengshu Hou
BigD433 "Contrastive Multi-view Learning for Graph Structure Learning" (Short)	Kai Huang, Dengzhe Liang, He Wang, and Yuncheng Jiang
BigD215 "[Vision Paper] Learning with Variational Objectives on Measures" (Short)	Vivien Cabannes
BigD445 "Detecting and Classifying Changes in Traffic Rules using Induction Loop Data" (Short)	Aziza Zhanabatyrova, Clayton Leite, and Yu Xiao
S16: Physics Informed Learning and Visualization	
BigD235 "Roughness index for loss landscapes of neural network models of partial differential equations" (Regular)	Keke Wu, Xiangru Jian, Rui Du, Jingrun Chen, and Xiang Zho
BigD392 "Interactive Visualization for Smart Power Grid Efficiency and Outage Exploration" (Regular)	Dongyun Han and Isaac Cho
BigD647 "Scalable Volume Visualization for Big Scientific Data Modeled by Functional Approximation" (Regular)	Jianxin Sun, David Lenz, Hongfeng Yu, and Tom Peterka
BigD293 "A Hybrid Model Based on Multi-level External Knowledge for Chinese Semantic Matching" (Short)	haoyang ma and hongyu guo
S17: Vision and Visualization	
BigD756 "Predicting Impression Evaluation of Building Exterior Appearance Using Street Image Big Data" (Regular)	Yusuke Imadegawa, Takuya Oki, Yoshiki Ogawa, and Chenbo Zhao
BigD403 "Multi-layer Caching and Parallel Streaming for Large Scale Cloud Optimized Point Cloud Data Visualization using WebGPU" (Short)	Pravin Poudel, Will Usher, and Steve Petruzza
BigD739 "Design and Development of a Computer Vision-Based Road Physical Feature Extraction" (Short)	Juliana Marie Agulto, Yeohan Lorenzo Noroña, Gian Carlo Gutierrez, Eric Benabaye, Macario II Cordel, Ann Franchesca Laguna, Jocelynn Cu, Joel Ilao, and Geanne Franco
BigD548 "YOLOv5s-BSS: A Novel Deep Neural Network for Crack Detection of Road Damage" (Short)	Conghua Wei, Xiaobo Zhang, Rong Li, Jixin Zhang, Zhehao Zhang, and Haonan Luo
BigD582 "Comparing ML OCR Engines on Texts from 19th Century Written in the Romanian Transitional Script" (Short)	Marc Frîncu, Marius Penteliuc, Simina Frîncu, Gheorghe Bran, and Manuela Zănescu
BigD497 "Low-latency Visual Previews of Large Synchrotron Micro-CT Datasets" (Short)	Nicholas Tan Jerome, Suren Chilingaryan, Thomas van de Kamp, and Andreas Kopmann
S18: Recommendations Systems and Web Mining	
BigD541 "Social Event Detection with Reinforced Deep Heterogeneous Graph Attention Network" (Regular)	Yongsheng Yu, Jia Wu, and Jian Yang
BigD483 "Group-Aware Interest Disentangled Dual-Training for Personalized Recommendation" (Regular)	Xiaolong Liu, Liangwei Yang, Zhiwei Liu, Xiaohan Li, Mingdai Yang, Chen Wang, and Philip S. Yu
BigD496 "Dual-Teacher Knowledge Distillation for Strict Cold-Start Recommendation" (Regular)	Weizhi Zhang, Liangwei Yang, Yuwei Cao, Ke Xu, Yuanjie Zhu, and Philip S. Yu
BigD574 "k-bitruss-Attributed Weighted Community Search on Attributed Weighted Bipartite Graphs" (Short)	Zuxuan Zhang, Hongxi Li, Kai Huang, and Yuncheng Jiang
S19: Predictive Analytics on Big Data	
BigD330 "Long-term Time Series Forecasting based on Decomposition and Neural Ordinary Differential Equations" (Regular)	Seonkyu Lim, Jaehyeon Park, Seojin Kim, Hyowon Wi, Haksoo Lim, Jinsung Jeon, Jeongwhan Choi, and Noseong Park

BigD442 "ABF-FNN: A new fuzzy neural network for predicting coal mine gas concentration hazard" (Regular)	Yimin Sun, Xiaobo Zhang, Zhehao Zhang, Yunyang Wu, Haihao Tang, and Haonan Luo
BigD626 "Diffforecast: Image Generation Based Highway Traffic Forecasting with Diffusion Model" (Regular)	Pengnan Chi and Xiaoliang Ma
BigD635 "Generalized Causal Tree for Uplift Modeling" (Regular) Video	Preetam Nandy, Xiufan Yu, Wanjun Liu, Ye Tu, Kinjal Basu, and Shaunak Chatterjee
S20: Deep Learning V	
BigD568 "NeuEmot: Reducing False Neutral Classification in the 2022 FIFA World Cup Using Low-Level Emotions" (Regular)	Ademola Adesokan and Sanjay Madria
BigD595 "Traffic Demand Prediction Based on Multi-dimensional Graph Convolutional Network" (Regular)	Peiying Zeng, Liying Jiang, Yongxuan Lai, and Fan Yang
BigD613 "Counterfactual Explanations for Time Series Data via Learned Saliency Maps" (Regular)	Peiyu Li, Omar Bahri, Soukaina Filali Boubrahimi, and Shah Muhammad Hamdi
BigD458 "Label Hierarchy Alignment for Improved Hierarchical Text Classification" (Short)	Ashish Kumar and Durga Toshniwal
BigD513 "VHGN: Cooperative Multiagent Reinforcement Learning with Historical Information Graph" (Short)	Liu Jiahao, Xu Jiale, Bao Haijia, and Li Ya
BigD545 "[Vision Paper] Hypergraph Neural Networks for Time-series Forecasting" (Short)	Hongjie Chen, Ryan Rossi, Kanak Mahadik, Sungchul Kim, and Hoda Eldardiry
S21: Data Ecosystem Basics and Vulnerabilities	
BigD586 "FOCAL: A Cost-Aware Video Dataset for Active Learning" (Regular)	Kiran Kokilepersaud, Yash-ye Logan, Ryan Benkert, Chen Zhou, Mohit Prabhushankar, Ghassan AlRegib, Enrique Corona, Kunjan Singh, and Mostafa Parchami
BigD669 "Measuring Bias" (Regular)	Aida Sharif Rohani and Ricardo Baeza-Yates
BigD450 "Vision Paper: Leveraging Industrial Big Data – Past, Present, and Future of the World Wide Lab" (Short)	Mohamed Behery, Philipp Brauner, Felix Glawe, Istvan Koren, Martina Ziefle, and Gerhard Lakemeyer
BigD374 "Predicting Linguistically Sophisticated Social Determinants of Health Disparities with Neural Networks: The Case of LGBTQ+ Minority Stress" (Short)	Cory Cascalheira, Santosh Chapagain, Ryan Flinn, Yuxuan Zhao, Soukaina Boubrahimi, Dannie Klooster, Alejandra Gonzalez, Emily Lund, Danica Laprade, Jillian Scheer, and Shah Hamdi
BigD716 "Causal Fairness-Guided Dataset Reweighting using Neural Networks" (Short)	Xuan Zhao, Klaus Broelemann, Salvatore Ruggieri, and Gjergji Kasneci
BigD727 "An Exploratory Study of Vulnerabilities in Big Data Systems" (Short) Video	Nikolas Tyllis, Faheem Ullah, and Muhammad Uzair
S22: Trustworthiness, Resilience, Privacy, and Security	
BigD340 "Robust Fraud Detection via Supervised Contrastive Learning" (Regular)	Vinay M.S., Shuhan Yuan, and Xintao Wu
BigD527 "Improving Adversarially Robust Sequential Recommendation through Generalizable Perturbations" (Regular)	Xun Yao, Ruyi He, Xinrong Hu, Jie Yang, Yi Guo, and Zijian Huang
BigD273 "Detecting Compromised IoT Devices Using Autoencoders with Sequential Hypothesis Testing" (Short)	Md Mainuddin, Zhenhai Duan, and Yingfei Dong
BigD383 "Active Data Reconstruction Attacks in Vertical Federated Learning" (Short)	Minh Vu, Tre' Jeter, Raed Alharbi, and my thai
S23: Fake Information, Personality, and Semantic Understanding	

BigD309 "FNDaaS: Content-agnostic Detection of Websites Distributing Fake News" (Regular)	Panagiotis Papadopoulos, Dimitris Spithouris, Evangelos P. Markatos, and Nicolas Kourtellis
BigD560 "Cross-Domain Fake News Detection Based on Coarse-Fine Grained Environments Reflecting Public Expectation" (Regular) Video	Guojun Liu and Yuefeng Ma
BigD479 "Multimodal Co-attention Transformer for Video-Based Personality Understanding" (Regular)	Mingwei Sun and Kunpeng Zhang
BigD418 "MERMAID: A Dataset and Framework for Multimodal Meme Semantic Understanding" (Regular)	Shaun Toh, Adriel Kuek, Wen-Haw Chong, and Roy Ka-Wei Lee
S24: Algorithms and Systems for Big Data Search	
BigD240 "Discovery and Matching Numerical Attributes in Data Lakes" (Regular)	Pattara Sukprasert, Pattara Sukprasert, Ryan Rossi, Fan Du, and Eunyee Koh
BigD622 "Sketching Multidimensional Time Series for Fast Discord Mining" (Regular)	Chin-Chia Michael Yeh, Yan Zheng, Menghai Pan, Huiyuan Chen, Zhongfang Zhuang, Junpeng Wang, Liang Wang, Wei Zhang, Jeff M. Phillips, and Eamonn Keogh
BigD256 "Increase Merge Efficiency in LSM Trees Through Coordinated Partitioning of Sorted Runs" (Short)	Qizhong Mao and Vagelis Hristidis
BigD438 "Chain-Based Outlier Detection for Complex Data Scenarios" (Short)	Huiwen Dong, Qing-Guo Wang, and Wei Ding
BigD660 "SuperBlocking: An Efficient Blocking Technique for Record Linkage" (Short)	Joyanta Basak, Sartaj Sahni, and Sanguthevar Rajasekaran
S25: Machine Learning Algorithms IV	
BigD735 "Multi-view Deep Markov Models for Time Series Anomaly Detection" (Regular)	Phuong Nguyen, Hiep Tran, and Tuan Le
BigD742 "Density-Based Prototypical Contrastive Learning on Visual Representations" (Regular)	Yueh-Lin Chung and Hsing-Kuo Pao
BigD406 "Discern: Leveraging Knowledge Distillation to Generate High Resolution Soil Moisture Estimation from Coarse Satellite Data" (Short)	Abdul Matin, Paahuni Khandelwal, Shrideep Pallickara, and Sangmi Pallickara
BigD402 "Feature Acquisition Using Monte Carlo Tree Search" (Short) (Video)	Sungsoo Lim, Diego Klabjan, and Mark Shapiro
BigD430 "Toward Efficient and Incremental Spectral Clustering via Parametric Spectral Clustering" (Short)	Jo-Chun Chen and Hung-Hsuan Chen
BigD437 "Causal Associations between Temporal Events" (Short)	Nguyen Ho, Trinh Cong Le, Van Long Ho, Nguyen Tuong Huynh, and Linh Bao Ngo
S26: Privacy Preserving Analytics	
BigD363 "PGAN-KD: Member Privacy Protection of GANs Based on Knowledge Distillation" (Short) Video	Zhang Tianhan, Yu Juan, Han Jianmin, and Peng Hao
BigD422 "Improving the Utility of Differentially Private SGD by Employing Wavelet Transforms" (Short)	Kanishka Ranaweera, David Smith, Dinh Nguyen, Pubudu Pathirana, Ming Ding, Thierry Rakotoarivelo, and Aruna Senevirathne
BigD461 "Zooming into abnormal events in video conferencing" (Short)	Shmuel Horowitz, Dima Kagan, Galit Fuhrmann Alpert, and Michael Fire
BigD763 "Analyzing Threat Vector in ICS Cyberattacks" (Short) (Video)	Ismael Villanueva-Miranda and Monika Akbar
BigD411 "Qobra: Fast Verification of Transactional Serializability with Quantum Annealing" (Short)	Natsuki Hamada, Kazuhiro Saito, and Hideyuki Kawashima
BigD679 "A personalized privacy-preserving semi-centralized recommendation system" (Short)	Carson Leung and Qi Wen

S27: Deep Learning III	
BigD492 "Towards cost-effective and resource-aware aggregation at Edge for Federated Learning" (Regular)	Ahmad Khan, Yuze Li, Xinran Wang, Sabaat Haroon, Haider Ali, Yue Cheng, Ali Butt, and Ali Anwar
BigD495 "Enhancing Representation Learning with Label Association for Multi-Label Text Classification" (Regular)	Wang Zhang, Xin Wang, Yuhong Wu, Xingpeng Zhang, and Huayi Zhan
BigD470 "A Dialogue Generation Adapter for LLM over Domain Knowledge Gap"	Noriaki Kawamae
BigD382 "Learning Pruned Structure and Weights Simultaneously from Scratch: an Attention based Approach" (Short)	Qisheng He, Weisong Shi, and Ming Dong
BigD414 "Autoencoders and Generative Adversarial Networks for Imbalanced Sequence Classification" (Short)	Stephanie Ger, Yegna Subramanian Jambunath, and Diego Klabjan
BigD425 "Improve interpretability of Information Bottlenecks for Attribution with Layer-wise Relevance Propagation" (Short)	Xiongren Chen, Jiuyong Li, Jixue Liu, Stefan Peters, Lin Liu, Thuc Duy Le, and Anthony Walsh
S28: Data Preprocessing, Data Cleaning, and Data Integration	
BigD354 "Detecting Semantic Errors in Tables using Textual Evidence" (Regular)	Minh Pham, Craig Knoblock, and Muhao Chen
BigD386 "Efficient Missing Value Imputation by Maximum Distance Likelihood" (Short)	Savong Bou, Toshiyuki Amagasa, Hiroyuki Kitagawa, Salman Ahmed Shaikh, and Akiyoshi Matono
BigD395 "An Analysis of Combined Data Augmentation in Time Series Prediction Tasks Using Discrete Wavelet Multilevel Decomposition" (Short)	Yuewen Shen, Xinhao Yang, Jiayu Zhao, and Ze Li
BigD405 "Data Integration Framework with Multi-source Big Data for Enhanced Forest Fire Prediction" (Short)	Parveen Kaur, Kshirasagar Naik, Richard Purcell, Srinivas Sampalli, Chung-Horng Lung, Marzia Zaman, and Abdul Mutakabbir
BigD538 "[Vision Paper] Self-configured Entity Resolution with pyJedAI" (Short)	Vasilis Efthymiou, Ekaterini Ioannou, Manos Karvounis, Manolis Koubarakis, Jakub Maciejewski, Konstantinos Nikoletos, George Papadakis, Dimitris Skoutas, Yannis Velegrakis, and Alexandros Zeakis
BigD578 "Multiloss-Based Optimization for Time Series Data Augmentation" (Short) (Video)	Omar Bahri, Peiyu Li, Soukaina Filali Boubrahimi, and Shah Muhammad Hamdi
S29: Cloud/Grid/Stream Computing	
BigD306 "gSPICE: Model-Based Event Shedding in Complex Event Processing" (Short)	Ahmad Slo, Sukanya Bhowmik, and Kurt Rothermel
BigD490 "ChimeraPy: A Scientific Distributed Streaming Framework for Real-time Multimodal Data Retrieval and Processing" (Short)	Eduardo Davalos, Umesh Timalina, Yike Zhang, Jiayi Wu, Joyce Horn Fonteles, and Gautam Biswas
BigD612 "Predicting Dynamic Memory Requirements for Scientific Workflow Tasks" (Short)	Jonathan Bader, Nils Diedrich, Lauritz Thamsen, and Odej Kao
BigD771 "Distributed Quantum Learning with co-Management in a Multi-tenant Quantum System" (Short)	Anthony D'Onofrio Jr., Amir Hossain, Lester Santana, Naseem Machlovi, Samuel Stein, Jinwei Liu, Ang Li, and Ying Mao
BigD648 "Co-Tuning of Cloud Infrastructure and Distributed Data Processing Platforms" (Short) Video	Isuru Dharmadasa and Faheem Ullah
BigD752 "Sailfish: A Dependency-Aware and Resource Efficient Scheduling for Low Latency in Clouds" (Short)	Jinwei Liu, Yingjie Lao, Ying Mao, and Rajkumar Buyya
S30: Link and Graph Mining	

BigD333 "ID-MixGCL: Identity Mixup for Graph Contrastive Learning" (Regular)	Gehang Zhang, Bowen Yu, Jiangxia Cao, Xinghua Zhang, Jiawei Sheng, Tingwen Liu, and Chuan Zhou
BigD670 "Multi-State Brain Network Discovery" (Regular)	Hang Yin, Yao Su, Xinyue Liu, Thomas Hartvigsen, Yanhua Li, and Xiangnan Kong
BigD271 "Efficient Estimation of Local Causal Effects in Graphs via Neighborhood Pooling" (Short)	Ryan Rossi, Somdeb Sarkhel, and Nesreen Ahmed
BigD657 "CGP: Centroid-guided Graph Poisoning for Link Inference Attacks in Graph Neural Networks" (Short)	Haozhe Tian, Haibo Hu, and Qingqing Ye
BigD659 "Towards Bi-Level Out-of-Distribution Logical Reasoning on Knowledge Graphs" (Short)	Fatimah Alotaibi and Dawei Zhou
BigD696 "Maximum Flow on Highly Dynamic Graphs" (Short)	Juntong Luo, Scott Sallinen, and Matei Ripeanu
S31: Machine Learning Algorithms V	
BigD755 "Heterogeneous Domain Adaptation with Positive and Unlabeled Data" (Regular)	Junki Mori, Ryo Furukawa, Isamu Teranishi, and Jun Sakuma
BigD767 "mTADS: Multivariate Time Series Anomaly Detection Benchmark Suits" (Regular)	David Baumgartner, Helge Langseth, Heri Ramampiaro, and Kenth Engø-Monsen
BigD480 "Semi-supervised 3D Video Information Retrieval with Deep Neural Network and Bi-directional Dynamic-time Warping Algorithm" (Regular)	Yintai Ma and Diego Klabjan
BigD441 "Prompting Large Language Models for Topic Modeling" (Short)	Han Wang, Nirmalendu Prakash, Nguyen Khoi Hoang, Ming Shan Hee, Usman Naseem, and Roy Ka-Wei Lee
BigD508 "Ego-Network Transformer for Subsequence Classification in Time Series Data" (Short)	Chin-Chia Michael Yeh, Huiyuan Chen, Yujie Fan, Xin Dai, Yan Zheng, Vivian Lai, Junpeng Wang, Zhongfang Zhuang, Liang Wang, Wei Zhang, and Eamonn Keogh
BigD619 "OLR-WA: Online Weighted Average Linear Regression in Multivariate Data Streams" (Short)	Mohammad Abu-Shaira, Alejandro Rodriguez, Greg Speegle, Ishfaq Ahmad, and Victor Sheng
S32: Deep Learning VI	
BigD624 "A Prior-Guided Meta-Weight Network for Long-tailed Noisy Data in Item Categorization" (Regular)	Tianqi Wang, Lei Chen, and Jing Gao
BigD668 "CASTLE: A Cascaded Spatio-Temporal Approach for Long-lead Streamflow Forecasting" (Regular)	Yong Zhuang, David L Small, Patrick D Flynn, Shafiqul Islam, Ping Chen, and Wei Ding
BigD699 "Aspect-based Meeting Transcript Summarization: A Two-Stage Approach with Weak Supervision on Sentence Classification" (Regular)	Zhongfen Deng, Seunghyun Yoon, Trung Bui, Franck Dernoncourt, Quan Hung Tran, Shuaiqi Liu, Wenting Zhao, Tao Zhang, Yibo Wang, and Philip Yu
BigD564 "Enhancing Radio Signals Classification with Complex Variation Deep Learning Models" (Short)	Nader Joojili, Zeinab Eskandari, Mohammed Abuibaid, Jun Steed Huang, M. Omair Shafiq, Alireza Yaghoobi, and Moa Dutta
BigD683 "JPAVE: A Generation and Classification-based Model for Joint Product Attribute Prediction and Value Extraction" (Short)	Zhongfen Deng, Hao Peng, Tao Zhang, Shuaiqi Liu, Wenting Zhao, Yibo Wang, and Philip Yu
BigD690 "Cohesive Attention-Based Explanations for Sequences and Explainability in Presence of Event Types" (Short)	Stephanie Ger, Yegna Subramanian Jambunath, Diego Klabjan, and Jean Utke
S33: Deep Learning VII	

BigD707 "SEED: An Effective Model for Highly-Skewed Streamflow Time Series Data Forecasting" (Regular)	Yanhong Li, Jack Xu, and David Anastasiu
BigD726 "ADAMM: Anomaly Detection of Attributed Multi-graphs with Metadata: A Unified Neural Network Approach" (Regular)	Konstantinos Sotiropoulos, Lingxiao Zhao, Pierre Jinghong Liang, and Leman Akoglu
BigD738 "Flexible Communication for Optimal Distributed Learning over Unpredictable Networks" (Regular)	Sahil Tyagi and Martin Swamy
BigD717 "CSER: Enhancing Cybersecurity Entity Recognition Through Multidimensional Feature Fusion" (Short)	Md Abu Marjan and Toshiyuk AMAGASA
BigD757 "M2-Mixer: A Multimodal Mixer with Multi-head Loss for Classification from Multimodal Data" (Short)	Grigor Bezirganyan, Sana Sellami, Laure Berti-Équille, and Sébastien Fournier
BigD432 "Temporal Knowledge Graph Question Answering Models Enhanced with GAT" (Short)	Wenjuan Jiang and Yi Guo
S34: Recommendation Systems and Social Media Systems	
BigD540 "Large-scale User Preference Tracking via Asynchronous and Asymmetric Updating at Twitter" (Regular, Video)	Ga Wu, Shivam Khare, Li Zhou, Yael Brumer, Jun-Ping Ng, and Ruowei Wang
BigD663 "TransGNN: Towards Knowledge Enhanced Top-K Recommendation via Transformed Heterogeneous Graph Neural Network" (Regular)	Shen Wang, Ziwei Fan, Jibing Gong, Xiaokai Wei, and Philip S. Yu
BigD753 "Forgetting User Preference in Recommendation Systems with Label-Flipping" (Regular)	Manal Alshehri and Xiangliang Zhang
BigD562 "Dual-Path Side Information Fusion for Sequential Recommendation" (Short)	Yu Zhang, Haiwei Pan, Kejia Zhang, Tianming Zhang, Qingquan Ren, and Wenjie Li
BigD630 "Leveraging Uncertainty Quantification for Reducing Data for Recommender Systems" (Short)	Xi Niu, Ruhani Rahman, Xiangcheng Wu, Riyi Qiu, Zhe Fu, and Depeng Xu
S35: High Performance/Parallel Computing Platforms	
BigD686 "HARVEST: High-Performance Artificial Vision Framework for Expert Labeling using Semi-Supervised Training" (Regular)	Nawras Alnaasan, Matthew Lieber, Aamir Shafi, Hari Subramoni, Scott Shearer, and Dhableswar K. Panda
BigD702 "PieRank: Embedded Large-Scale Sparse Matrix Processing" (Regular) Video	Michelle Zhou
BigD723 "Computing Group-By and Aggregate on Massively Parallel Systems" (Regular)	Minh Pham, Chengcheng Mou, Benjamin HSU, and Yicheng Tu
BigD317 "SRN-SZ: Deep Learning-Based Scientific Error-bounded Lossy Compression with Super-resolution Neural Networks" (Short)	Jinyang Liu, Sheng Di, Sian Jin, Kai Zhao, Xin Liang, Zizhong Chen, and Franck Cappello
BigD384 "On Overcoming HPC Challenges of Trillion-Scale Real-World Graph Datasets" (Short, Video Recording)	Mohsen Koohi Esfahani, Paolo Boldi, Hans Vandierendonck, Peter Kilpatrick, and Sebastiano Vigna
S36: Semantic-based Data Mining and Mining of Scientific Data	
BigD347 "A Scalable Approach to Aligning Natural Language and Knowledge Graph Representations: Batched Information Guided Optimal Transport" (Regular)	Alexander Kalinowski, Deepayan Datta, and Yuan An
BigD571 "Pandemic Culture Wars: Partisan Differences in the Moral Language of COVID-19 Discussions" (Regular)	Ashwin Rao, Siyi Guo, Sze-Yuh Nina Wang, Fred Morstatter, and Kristina Lerman
BigD344 "Integrating Noisy Knowledge into Language Representations for E-Commerce Applications" (Short)	Karan Samel, Jun Ma, Zhengyang Wang, Tong Zhao, and Irfan Essa
BigD607 "PSQS: Parallel Semantic Querying Service for Self-describing File Formats" (Short)	Chenxu Niu, Wei Zhang, Suren Byna, and Yong Chen
BigD446 "Constructing Knowledge Graph from Cyber Threat Intelligence Using Large Language Model" (Short)	Jiehui Liu and Jieyu Zhan

Industry and Government Program Sessions

SESSION S1 - Day 1: Friday, December 15, 2023 (Session Chair: Dominik Ślęzak)		
Time	Title	Presenter/Author
15:00-15:20	[N233] Exploring Approaches to Optimize the Performance of Predictive Coding on Multilanguage Data Sets	Christian Mahoney, Nathaniel Huber-Fliflet, Peter Gronvall, Chris Clark, Jianping Zhang, Fusheng Wei, Qiang Mao
15:20-15:40	[N234] Engineering Data Assets for Public Health Applications: A Covid-19 Case Study	Mohan Timilsina
15:40-15:55	[N206] DARC: High-dimensional Diffusing Anomaly Detection and Root Cause Location in Cloud Computing Systems	Wanning Sun, Xuhua Ma, Ruimin Peng, Yifan Xu, Dongrui Wu
15:55-16:10	[N209] Apurba's: Specialized Models and Advanced Techniques in Bengali OCR for Diverse Document Types	AKM Shahariar Azad Rabby, Hasmot Ali, Md. Majedul Islam, Fuad Rahman
16:10-16:25	[N215] Market Size Estimation Model at the Product Level based on Text Mining Approach	Ye Lim Jung, Hyoung Sun Yoo, Ji Hui Kim
16:25-16:40	[N246] Explainable Text Classification for Legal Document Review in Construction Delay Disputes	Nathaniel Huber-Fliflet, Jianping Zhang, Peter Gronvall, Fusheng Wei
SESSION S2 - Day 1: Friday, December 15, 2023 (Session Chair: Hosub Lee)		
Time	Title	Presenter/Author
16:50-17:10	[N256] Automatic Data Transformation Using Large Language Model – An Experimental Study on Building Energy Data	Ankita Sharma, Xuanmao Li, Hong Guan, Guoxin Sun, Liang Zhang, Lanjun Wang, Kesheng Wu, Lei Cao, Erkang Zhu, Alexander Sim, Teresa Wu, Jia Zou
17:10-17:30	[N259] PersonaSAGE: A Multi-Persona Graph Neural Network	Gautam Choudhary, Iftikhar Ahamath Burhanuddin, Eunyee

		Koh, Fan Du, Ryan Rossi
17:30-17:50	[N262] Revisiting Stylized Facts for Modern Stock Markets	Ethan Ratliff-Crain, Colin M. Van Oort, James Bagrow, Matthew T. K. Koehler, Brian F. Tivnan
17:50-18:10	[N264] MM-TrafficRisk: A Video-based Fleet Management Application for Traffic Risk Prediction, Prevention, and Querying	Minh-Son Dao, Hilmil Pradana, Koji Zettsu
18:10-18:30	[N266] NPRL: Nightly Profile Representation Learning for Early Sepsis Onset Prediction in ICU Trauma Patients	Tucker Stewart, Katherine Stern, Grant O'Keefe, Ankur Teredesai, Juhua Hu
SESSION S3 - Day 2: Saturday, December 16, 2023 (Session Chair: John Wu)		
Time	Title	Presenter/Author
10:30-10:50	[N230] Towards Predictive Lifetime-Oriented Temperature Control of Power Electronics in E-vehicles via Reinforcement Learning	Anqi Chu, Xiang Xie, Chris Manuel Hermann, Wilhelm Stork, Jörg Roth-Stielow
10:50-11:10	[N205] Uncovering and Understanding Smart TV Users' Picture Quality Preferences via Big Data Analytics	Hosub Lee
11:10-11:30	[N211] Applied Data Science for Leasing Score Prediction	Giuseppe Cianci, Roberto Goglia, Riccardo Guidotti, Matteo Kapllaj, Roberto Mosca, Andrea Pugnana, Franco Ricotti, Salvatore Ruggieri
11:30-11:50	[N218] Load Balancing Algorithms and Their Impacts on Apache Kafka	Hung-Chang Hsiao, Chia-Ping Tsai, Zheng-Xian Li, Chao-Heng Lee, Jia-Sheng Chen, Yu-Chen Lai, Jia-Chi Wang, Shao-Chi Li, Jih-Cyuan Gao, Yi-Huan Lee
11:50-12:10	[N220] Near Neighbor Search for Constraint Queries	Gaurav Gupta, Anup Rao, Tung Mai, Ryan Rossi, Xiang Chen, Saayan Mitra, Anshumali Shrivastava

12:10-12:20	[N203] Temporal Treasure Hunt: Content-based Time Series Retrieval System for Discovering Insights	Chin-Chia Michael Yeh, Huiyuan Chen, Xin Dai, Yan Zheng, Yujie Fan, Vivian Lai, Junpeng Wang, Audrey Der, Zhongfang Zhuang, Liang Wang, Wei Zhang
12:20-12:30	[N204] Time Series Synthesis Using the Matrix Profile for Anonymization	Audrey Der, Chin-Chia Michael Yeh, Yan Zheng, Junpeng Wang, Huiyuan Chen, Zhongfang Zhuang, Liang Wang, Wei Zhang, Eamonn Keogh
SESSION S4 - Day 2: Saturday, December 16, 2023 (Session Chair: Dejing Dou)		
Time	Title	Presenter/Author
14:00-14:20	[N221] Visual Insight Recommendation: From Ranking Insight Visualizations to Insight Types	Camille Harris, Ryan Rossi, Sana Malik, Jane Hoffswell, Fan Du, Tak Yeon Lee, Eunyeek Koh, Handong Zhao
14:20-14:40	[N222] Detecting industrial vehicles' duty levels using contrastive learning	Luca Cagliero, Silvia Buccafusco, Francesco Vaccarino, Lucia Salvatori, Riccardo Loti
14:40-15:00	[N223] Improving conversion rate prediction via self-supervised pre-training in online advertising	Alex Shtoff, Yohay Kaplan, Ariel Raviv
15:00-15:20	[N225] Efficient Extraction of Insights at the Edges of Distributed Systems	Amadou Ba, Fearghal O'Donncha, Joern Ploennigs, Muneeza Azmat
15:20-15:40	[N226] AI ATAC 1: An Evaluation of Prominent Commercial Malware Detectors	Robert Bridges, Brian Weber, Justin Beaver, Jared Smith, Miki Verma, Savannah Norem, Kevin Spakes, Cory Watson, Jeff Nichols, Brian Jewell, Michael Iannacone, Chelsey Dunivan Stahl, Kelly Huffer, T. Sean Oesch

15:40-15:50	[N216] Interpretable Unsupervised Log Anomaly Detection	Jaeho Bang, Sungchul Kim, Ryan Rossi, Tong Yu, Handong Zhao
15:50-16:00	[N217] Cost-Efficient Cross-Region Copy in Cloud Data Warehouse: An Evolutionary Approach	Huijun Wu, Maosong Fu, Mansi Kapoor, Zheng Li, Donggeon Kim, Jihyeon Ha, Sungwook Byun, Prashanth Rajendran, San Tan
SESSION S5 - Day 3: Sunday, December 17, 2023 (Session Chair: Luca Cagliero)		
Time	Title	Presenter/Author
10:30-10:50	[N236] Ready for the Big Game: How FanDuel Boosts Conversions and Revenue at Scale with a Real-Time Recommender System for Daily Fantasy Sports	Varun Chugh, William Kretz, Steven Rosa, Brooks Beckelman, Hao Tong, Dejan Mitkovski
10:50-11:10	[N238] Sensorless Monitoring of Shipping Containers	Misaki Mito, Chi Heem Wong, Arnab Chakrabarti
11:10-11:30	[N248] VEMUT-Sub-Sampling: A Novel Method for Sparse Multivariate Time-Series Vehicle Data	Nadin-Katrin Apel, Constantinos Antoniou
11:30-11:50	[N249] Decentralized Personalized Online Federated Learning	Renzhi Wu, Saayan Mitra, Xiang Chen, Anup Rao
11:50-12:05	[N228] Individualized Reservation fare optimization for Designated Driver Service	Kyuyoung Lee, Jiseon Lee, Seungyoun Lee, Hoonyong Shim, Jungmin Kim
12:05-12:20	[N229] Uncertainty Estimation for a Dual-Embedding based Entity Extraction Service	Hamed Khorasgani, Namrata Ghadi, Saumil Shah, Henry Zhang
12:20-12:30	[N232] Large Scale Multiplex Latent Graphs for Recommendation in Baidu	Jie Liu, Zhipeng Jin, Yi Yang, Wei Jia, Xuewu Jiao, Shuanglong Li, Lin Liu
SESSION S6 - Day 3: Sunday, December 17, 2023 (Session Chair: Ovidiu-Cristian Marcu)		
Time	Title	Presenter/Author
14:00-14:20	[N250] NNCR: Revising Classifications using Embedding Based K-Nearest-Neighbor Search	Yu-Hsuan Kuo
14:20-14:40	[N252] Refactoring ETL Flows in The Wild	Dolev Adas, Ohad Eytan, Josep Sampe, Paula Ta-Shma, Guy Khazma

14:40-15:00	[N253] Audience Prospecting for Dynamic-Product-Ads in Native Advertising	Eliran Abutbul, Yohay Kaplan, Naama Krasne, Oren Somekh, Or David, Omer Duvdevany, Evgeny Segal
15:00-15:20	[N254] AltOOM: A Data-driven Out of Memory Root Cause Identification Strategy	Pranjal Chakraborty, Naser Ezzati-Jivan, Vahid Azhari, Francois Tetreault
15:20-15:35	[N224] Boosting Feedback: A Framework for Enhancing Ground Truth Data Collection	Kota Tsubouchi, Shuji Yamaguchi, Tatsuru Higurashi
15:35-15:50	[N244] Extending the Horizon by Empowering Government Customer Service Officers with ACQAR for Enhanced Citizen Service Delivery	Alvina Hui Shan Lee, Venky Shankararaman, Eng Ouh
15:50-16:00	[N260] How Global Retailer ADEO Migrated to Google BigQuery with Database Virtualization	Ehab Abdelhamid, Amirhossein Aleyasen, Michael Duller, Eric Foratier, Vincent Fruleux, Mirella Katch, Gourab Mitra, Rima Mutreja, Jozsef Patvarczki, Matthew Pope, Nikos Tsikoudis, F. Michael Waas
SESSION S7 - Day 4: Monday, December 18, 2023 (Session Chair: Dominik Słezak)		
Time	Title	Presenter/Author
10:30-10:50	[N268] A Case Study on ChatGPT Question Generation	Winston Chan, Aijun An, Heidar Davoudi
10:50-11:10	[N269] A Deep Learning Pipeline for Optimizing Large-scale Phase Field Simulations	Ramakrishnan Kannan, Cristina Garcia-Cardona, Balasubramaniam Radhakrishnan, Sudip Seal
11:10-11:30	[N270] Will my Flight be on Time? Learning from Part Failures to Predict Future Reliability	Jongjun Park, Fei Chiang, Eduardo Correia da Silva, Kevin Lytwyn, Stephen Veldhuis
11:30-11:50	[N271] Locating disparities in machine learning	Moritz von Zahn, Oliver Hinz, Stefan Feuerriegel
11:50-12:05	[N258] Online Forecasting Based Anomaly Detection For Monitoring Large Scale Streaming Data	Wei Zhang, David Arbour

12:05-12:20	[N261] Two-sample KS test with Apache Spark's approxQuantile	Bradley Eck, Duygu Kabakci-Zorlu, Amadou Ba
12:20-12:30	[N275] Towards Unified Data Ingestion and Transfer for the Computing Continuum	Muhammad Arslan Tariq, Ovidiu-Cristian Marcu, Gregoire Danoy, Pascal Bouvry
SESSION S8 - Day 4: Monday, December 18, 2023 (Session Chair: Dejing Dou)		
Time	Title	Presenter/Author
14:00-14:20	[N272] HungerGist: An Interpretable Predictive Model for Food Insecurity	Yongsu Ahn, Muheng Yen, Yu-Ru Lin, Zian Wang
14:20-14:40	[N273] Stock Movement and Volatility Prediction from Tweets, Macroeconomic Factors and Historical Prices	Shengkun Wang, YangXiao Bai, Taoran Ji, Kaiqun Fu, Linhan Wang, Chang-Tien Lu
14:40-15:00	[N276] Pricing Used Vehicles at Volkswagen Financial Services AG	Shayan Jawed, Jan Stening, Lars Schmidt-Thieme
15:00-15:20	[N277] Physical Database Design for Manufacturing Business Analytics	Norifumi Nishikawa, Shinji Fujiwara, Yuto Hayamizu, Kazuo Goda
15:20-15:35	[N263] Fostering Innovation in Urban Transportation Risk Management: A Multi-Sector Collaborative Benchmarking Platform	Minh-Son Dao, Huy Quang Ung, Sadanori Ito, Shinya Wada, Koji Zettsu
15:35-15:50	[N274] Data-Driven Approaches to Detecting Misdemeanors in Truck Logistics using GPS Data	Ayumu Hidaka, Ryota Shin, Atsushi Tsuchiya, Norihiko Nakabayashi, Yukihiko Okada, Yohei Shida
15:50-16:00	[N278] Theory meets practice approach for Event Correlations (video)	Sai Charan Emmadi, Parag Agrawal, Satya Samudrala, Vikrant Shimpi, Maitreya Natu

Workshops

Computational Archival Science		
<i>Workshop Chairs: Mark Hedges, Victoria Lemieux, Richard Marciano</i> Sunday 17 December (all times are in Central European Time, UTC+1)		
Time	Title	Presenter/Author
8:50 – 9:00	Welcome	Mark Hedges (King’s College London), Victoria Lemieux (U. British Columbia), Richard Marciano (U. Maryland)
09:00 – 10:00	SESSION 1: Classification & Annotation	
09:00 – 09:20	An Intelligent Class – The Sequel: The Development Of A Novel Context Capturing Method For The Functional Auto Classification Of Records (S01209)	Nathaniel Payne
09:20 – 09:40	Specimen Outlining: A Computational Archival Science Approach (S01216)	David Breen, Andrew Senin, Ajani Levere, Jane Greenberg
09:40 – 10:00	Who’s in My Archive? An End-to-End Framework for Automatic Annotation of TV Personalities (S01206)	Maurizio Montagnuolo, Fulvio Negro, Alberto Messina, Angelo Bruccoleri, Roberto Iacoviello
10:00 – 10:30	Coffee Break	
10:30 – 11:30	SESSION 2: Authenticity & Trust	
10:30 – 10:50	Authenticating Citizen Journalism Videos by Incorporating the View of Archival Diplomatics into the Verification Processes of Open-source Investigators (S01211)	Hoda Hamouda
10:50 – 11:10	Will Blockchain Technology Change How Well National Archives Preserve the Trustworthiness of Digital Records?: Preliminary Results of a Survey (S01205)	Özhan Saglik, Victoria Lemieux
11:10 – 11:30	Analogous Analogues: Digital Twins and Hardware Tracking in GLAM Collections (S01208)	Dian Ross, Edmond Cretu, Victoria Lemieux
11:30 – 12:30	SESSION 3: Emerging Challenges & Opportunities	
11:30 – 11:50	Critical Community-Centeredness: Ethical Considerations for Computational Archival Studies (S01203)	Madelynn Dickerson, Audra Eagle Yun
11:50 – 12:10	Accelerating Precision Research and Resolution Through Computational Archival Science Pedagogy (S01204)	Sarah A. Buchanan, Jennifer L. Wachtel, Jennifer A. Stevenson
12:10 – 12:30	The utility of standards and good practice guidelines for records professionals: comparing apples, oranges, and other fruits (S01215)	Shadrack Katuu
12:30 – 2:00	Lunch Break	
2:15 – 3:00	Keynote	Emanuele Frontoni (Università di Macerata)
3:00 – 4:00	SESSION 4: Generative AI and LLMs	
3:00 – 3:20	Can GPT-4 Think Computationally about Digital Archival Practices? (S01213)	William Underwood, Joan Gage
3:20 – 3:40	Exploring the Application of Large Language Models in Detecting and Protecting Personally Identifiable Information in Archival Data: A Comprehensive Study (S01207)	Jianliang Yang, Xiya Zhang, Kai Liang, Yuenan Liu
3:40 – 4:00	AI-Generated Images as an Emergent Record Format (S01212)	Jessica Bushey
4:00 – 4:30	Coffee Break	
4:30 – 5:30	SESSION 5: Discussion and closing	
11th International Workshop on Distributed Storage and Blockchain Technologies for Big Data		
<i>Workshop Chairs: Hui Li, Hanxu Hou and Han Wang</i> December 17th		

Time	Title	Presenter/Author
8:00 – 8:20	S04201, “RNBFT: Leveraging Randomness to Achieve Scalable Byzantine Consensus”	Parth Shukla and Saeed Samet
8:20 – 8:40	S04202, “Optimal Repair Algorithm of Single-Disk Failure for Array Codes with Local Properties”	Chuang Luo, Han Xu Hou, Peng Zhang, and Hui Li
8:40 – 9:00	S04203, “Blockchain-based verifiable and reliable file access control layer for cloud storages”	Daun Kim, Hyunjoo Yang, Howon Lee, and Sejin Park
9:00 – 9:20	S04204, “A Federated Learning Scheme Based on Lightweight Differential Privacy”	Wenlong Song, Hong Chen, Zhijie Qiu, and Lei Luo
9:20 – 9:40	S04205, “Reed-Solomon Codes Over Ring with Lower Computational Complexity”	Shicheng Tan, Hanxu Hou, and Leilei Yu
9:40 – 10:00	S04206, “MPI4Spark Meets YARN: Enhancing MPI4Spark through YARN support for HPC”	Kinan Alattar, Aami Shafi, Hari Subramoni, and Dhabaleswar K. Panda
10:00 – 10:20	S04208, “H-MIS: A Hierarchical Multi-Identifier System Based on Blockchain”	Qi Lyu, Hui Li, Xinnan Lin, Han Wang, Hanxu Hou, Yuguo Yuguo, Qianbin Chen, Ping Fan, Gang Wan, Xiang Zhu, Selwyn Deng, Weixiang Huang, Jianping Wu, Jieren Cheng, and Wenyuan Yang
10:20 – 10:40	S04209, “Design and Implementation of an ERC-20 Smart Contract on the Ethereum Blockchain”	Joshua Priest, Cameron Cooper, Savvy Lovell, Yong Shi, and Dan Lo
10:40 – 11:00	Coffee Break	
11:00 – 11:20	S04210, “SmartDT: An Effective Vulnerability Detection System of Smart Contracts Based on Deep Learning”	Xiaozhou You, Hui Li, Han Wang, and Faisal Mehmood
11:20 – 11:40	S04211, “Lazy Read: Asynchronous Execution of Synchronous File I/O”	Ansgar Lößler, Florian Raskob, and Björn Scheuermann
11:40 – 12:00	S04212, “Towards a Peer-to-Peer Data Distribution Layer for Efficient and Collaborative Resource Optimization of Distributed Dataflow Applications”	Dominik Scheinert, Soeren Becker, Jonathan Will, Luis Englaender, and Lauritz Thamsen
12:00 – 12:20	BigD217(->S04), “BFRecSys: A Blockchain-based Federated Matrix Factorization for Recommendation Systems”	Dongkun Hou and Jie Zhang
12:20 – 12:40	BigD257(->S04), “Optimized Model of Ledger Database Management to handle Vehicle Registration”	Neha Gaonkar, Parnia Samimi, Jagdev bhogal, Luke Porter, and Rob Squire
12:40 – 13:00	BigD596(->S04), “Deep Reinforcement Learning based Data Placement Optimization in Data Center Networks”	Ravi Kaler and Durga Toshniwal
Closing Remarks		

4th International Workshop on User Understanding from Big Data <i>Workshop Chairs: Claire Ding, Wutao Wei</i>		
Time	Title	Presenter/Author
8:30-8:40	Opening Remarks	Claire Ding
8:40-9:15	A Store Evaluation System using Automatic Scoring of Retail Stores Based on Product Review Analysis	Da Li, Hiroto Nishikawa, Mayumi Ueda, and Shinsuke Nakajima
9:15-9:50	User Latent Interest Estimation in Real Space: A Comparative Analysis of Time-Series and Non-Time-Series Processing Algorithms	Takanobu Omura, Da Li, Panote Siritraya, Katsumi Tanaka, Yukiko Kawai, and Shinsuke Nakajima
9:50-10:25	Data Augmentation Improves Fuzzy Association Analysis - A Comparative Study with Qlik Sense	Bing NI, Cheuk-Yin CHEUNG, Chi-Hung NG, and Fung-Sang CHAN

10:25-10:30	Closing Remarks
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9th International Workshop on Methods to Improve Big Data Science Projects		
Workshop Chair: Jeffrey Saltz		
December 15 th		
Time	Title	Presenter/Author
14:00	<i>Data-push projects and their unique feature: managing with anomalies</i>	Antoine Bordas
14:25	<i>ExplainerX: An Integrated and Explainable AI Framework for Nearly Zero-Energy Buildings</i>	Ladjel Bellatreche
14:50	<i>Big Data Tools: Interoperability Study and Performance Testing</i>	Asma Dhaouadi
15:15	<i>Bridging the Gap in AI-Driven Workflows: The Case for Domain-Specific Generative Bots</i>	Akit Kumar
Coffee Break		
16:00	<i>A Capacity Framework of Community Readiness for Supporting Big Data Science Projects during Cyberinfrastructure Diffusion</i>	Kerk Kee
16:25	<i>Understanding Data Pre-processing with a Hybrid Diagram Integrating ER and Data Flow Notation</i>	Robin Varghese
16:50	<i>Extending Variability-Aware Model Selection with Bias Detection in Machine Learning Projects</i>	Cristina Tavares
17:15	<i>MLOps in Data Science Projects: A Review</i>	Christian Haertel
17:40	<i>Data Science Failure: A Literature Review</i>	Sucheta Lahiri
Closing Remarks		

The 6th International Workshop on Big Data Engineering and Analytics in Cyber-Physical Systems (BigEACPS'23)		
Workshop Chairs: Akbar Namin – Texas Tech University		
Time	Title	Presenter/Author
14:00 – 14:30	<i>Detecting Phishing URLs using the BERT Transformer Model</i>	Denish Otieno
14:30 – 15:00	<i>Predictive Analytics in IoT and CPS: Enhancing Industrial Machinery Reliability through Sensor Data-Driven Remaining Useful Life Estimation</i>	Emrullah Gultekin
15:00 – 15:30	<i>The Performance of Machine and Deep Learning Algorithms in Detecting Fake Reviews</i>	Bharkavi Sachithanandam
15:30 – 16:00	<i>AGVs Quality of Service throughput prediction via neural networks</i>	Katarzyna Prokop
16:00 – 16:30	<i>Exploiting Large Language Models (LLMs) through Deception Techniques and Persuasion Principles</i>	Sonali Singh
16:30 – 17:00	<i>Interaction in Metaverse: A Survey</i>	Hong Lin
17:00 – 17:30	<i>Dynamic Analysis for the Detection of Locked Ether Smart Contracts</i>	Zulfiqar Khan
17:30 – 18:00	Closing Remarks	Akbar Namin

7th International Workshop on Applications of Big Data Technology in the Transport Industry		
Workshop Chairs: John Easton (University of Birmingham, UK), Joe Preece (University of Birmingham, UK), and Satish V. Ukkusuri (Purdue University, USA)		
Time	Title	Authors
08:30	Welcome	
08:40 – 09:00	BigD511 – Proposal of an AI-based approach for Urban Traffic Prediction from Mobility Data	Mariaelena Berlotti, Sarah Di Grande, Salvatore Cavalieri, Vincenza Torrisi, and Giuseppe Inturri
09:00 – 09:20	BigD364 – MixPCD: a Novel Method of Constructing Driving Cycle for Electric Bus with Sparse Data	Xingxing Wang, Peilin Ye, Yelin Deng, Yinnan Yuan, Yu Zhu, and Hongjun Ni
09:20 – 09:40	S09209 – ChattSpeed: Toward a New Dataset for Single Camera Visual Speed Estimation for Urban Testbeds	Yasir Hassan and Mina Sartipi

09:40 – 10:00	S09206 – Identifying Regions of High Demand for Transportation Services based on Cluster Evolution and Graph Analysis	Ivens Portugal, Paulo Alencar, and Donald Cowan
10:00 – 10:30	Coffee Break	
10:30 – 10:50	S09203 – Empowering Search and Rescue Operations with Big Data Technology: A Comprehensive Study of YOLOv8 Transfer Learning for Transportation Safety	Luciano Lima, Fabio Andrade, Youcef Djenouri, Carlos Pfeiffer, and Marcos Moura
10:50 – 11:10	S09202 – Optimization of Dangerous Goods Stowage: A Hybrid Approach between Faster R-CNN and Coronavirus Metaheuristic	Chaabane Abdelali, Yachba khadidja, and Ladjel Bellatreche
11:10 – 11:30	S09210 – Unstructured Transportation Safety Board Findings Categorization Using the Knowledge Graph Pipeline	Ritesh Panday and Chung-Hong Lung
11:30 – 11:50	S09207 – Driving into Uncertainty: An Adversarial Generative Approach for Multivariate Scenario Generation	Michele Carbonera, Michele Ciavotta, and Enza Messina
11:50 – 12:10	BigD345 – Charting the Course of Ship Track Prediction: A Novel Approach for Maritime Traffic Analysis and Enhanced Situational Awareness	Lubna Eljabu
12:10 – 12:30	S09208 – Leveraging Probe Data and Machine Learning to Derive and Interpret Macroscopic Fundamental Diagrams Across U.S. Cities	Ling Jin, Xiaodan Xu, Yuhan Wang, Kaveh Farokhi Sadabadi, Alina Lazar, Duleep Rathgamage Don, Zachary Needell, C. Anna Spurllock, Mahyar Amirgholy, and Mona Asudeg
12:30	Closing Remarks	

Workshop 8th Workshop on Real-time Stream Analytics, Stream Mining, CER/CEP & Stream Data Management in Big Data <i>Workshop Chairs: Sabri SKHIRI</i>		
Time	Title	Presenter/Author
2:00 PM - 2:40 PM	Keynote 1: Combining expressivity and performance in distributed data processing	Luca De Martini & Alessandro Margara, Politecnico di Milano
2:40 - 3:20	Keynote 2: Serverless Stream Processing on Apache Flink: Early Lessons Learned	Konstantin Knauf, Confluent
3:20- 3:40	BigD734 Mitigating Concept Drift in Distributed Contexts with Dynamic Repository of Federated Models (Video)	Elena Tsiporkova, Michiel De Vis, Sarah Klein, Anna Hristoskova Sirris, Belgium Veselka Boeva, Blekinge Institute of Technology, Sweden
3:40 - 4:00	BigD239 Enhancing Concept Drift Detection in Drifting and Imbalanced Data Streams through Meta-Learning	Gabriel Aguiar, Alberto Cano, Virginia Commonwealth University, United States of America
4:00 - 4:30	Coffee Break	
4:30: 4:50	BigD519 A Semi-Supervised Classification Algorithm for Concept Drift and Class Imbalance Data Stream	ChaoFan Chen, Tianshui Gu, Kezhong Lu, College of Computer Science and Software Engineering of Shenzhen University, Shenzhen, China
4:50 - 5:10	BigD768 AutoClass: AutoML for Data Stream Classification	Maroua Bahri, Nikolaos Georgantas, Inria Paris, France

Workshop 8th Workshop on Real-time Stream Analytics, Stream Mining, CER/CEP & Stream Data Management in Big Data <i>WorkshopChairs: Sabri SKHIRI</i>		
Time	Title	Presenter/Author
5:10 - 5:30	S10202 Toward Parallelization Technique for Stream-based Lossless Data Compression	Taiki Kato, Shinichi Yamagiwa, and Koichi Wada,
5:30 - 5:50	S10203 Online Closed Episode Mining with Root-Order Decomposition	Hinano Sako and Yoshitaka Yamamoto
5:50 - 6:10	S10204 Continuous Soccer Pass Detection: A Comparison between Traditional and Streaming Machine Learning Methods	Stefania Menconi, Giacomo Ziffer, Alessio Bernardo, and Emanuele Della Valle, Politecnico di Milano, Italy
6:10 - 6:15	Closing Remarks	

The 7th Annual Workshop on Applications of Artificial Intelligence in the Legal Industry <i>WorkshopChairs: Han Qin, Jianping Zhang, Nathaniel Huber-Fliflet, Adam Dabrowski, and Jingchao Yang</i>		
Time	Title	Presenter/Authors
2:00-2:20 pm	Opening Remarks	
2:20-2:40 pm	Towards Open-Set Contract Clause Recognition	Angelo Impedovo, Giuseppe Rizzo, and Antonio Di Mauro
2:40:3:00 pm	Developing and Evaluating a Model-Based Metric for Legal Question Answering Systems	Dilan Bakır, Beytullah Yıldız, and Mehmet S. Aktas
3:00-3:20 pm	Enhancing Predictive Coding: Empirical Insights from Masked Language Model Fine-Tuning	Fusheng Wei, Robert Keeling, Nathaniel Huber-Fliflet, etc.
3:20-3:50 pm	Invited Talk	
3:50-4:20 pm	Coffee Break	
4:20-4:40 pm	An Empirical Analysis of Text Segmentation for BERT Classification in Extended Documents	Jingchao Yang and Ankura AI Team
4:40-5:00 pm	Graph-Based Approach for European Law Classification	Raffaele Russo, Giuliano Di Giuseppe, Alessandro Vanacore, Valerio La Gatta, Antonino Ferraro, Antonio Galli, Marco Postiglione, and Vincenzo Moscato
5:00-5:30 pm	Invited Talk	
5:30-5:50 pm	Exploring the Performance Impacts of Training Predictive Models with Inclusive Email Threads	Chris Clark, Jianping Zhang, Nathaniel Huber-Fliflet, Han Qin, and Adam Dabrowski
5:50-6:10 pm	Explainable e-Discovery (XeD) Using an Interpretable Fuzzy ARTMAP Neural Network for Technology-Assisted Review	Charles Courchaine, Tasnova Tabassum, Corey Wade, and Ricky Sethi

6:10-6:30 pm	Closing Remarks
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3rd Workshop on Knowledge Graphs and Big Data In Conjunction with IEEE Big Data 2023 Friday, Dec. 15, 2023 <i>Workshop Co-Chairs: Yuan An, Jane Greenberg, Yuan Ling, Alex Kalinowski</i>		
Time (Central European Standard Time GMT+1)	Title	Authors
9:00-9:15am	STROOBnet Optimization via GPU-Accelerated Proximal Recurrence Strategies	Edward (Ted) Holmberg, Mahdi Abdelguerfi, and Elias Ioup
9:15-9:30am	BUILD-KG: Integrating Heterogeneous Data Into Analytics-Enabling Knowledge Graphs	Kara Schatz, Pei-Yu Hou, Alexey Gulyuk, Yara Yingling, and Rada Chirkova
9:30-9:45am	Knowledge Prompt for Whisper: An ASR Entity Correction Approach with Knowledge Base	Min Zhang, Xiaosong Qiao, Yanqing Zhao, Chang Su, Yinglu Li, Yuang Li, Song Peng, Shimin Tao, and Hao Yang
9:45-10:00am	Supporting Practical URI Mappings in Virtual Knowledge Graph-based Relational Data Integration	Shogo Sato, Tadashi Masuda, and Toshiyuki Amagasa
10:00-10:15am	Coffee Break	
10:15-10:30am	Knowledge Graphs for Competency-Based Education	Andrea Linxen, Florian Endel, Simone Opel, and Christian Beecks
10:30-10:45am	Leveraging Knowledge Graphs for Matching Heterogeneous Entities and Explanation	Sahar Ghassabi, Behshid Behkamal, and Mostafa Milani
10:45-11:00am	Ontology-Based Generation of Data Platform Assets	Vincenzo de Leo, Gianni Fenu, David Greco, Nicolo' Bidotti, Paolo Platter, Enrico Motta, Andrea Nuzzolese, Francesco Osborne, and Diego Reforgiato
11:00-11:15am	Characterizing Evolutionary Trends in Temporal Knowledge Graphs with Linear Temporal Logic	Valeria Fionda and Giuseppe Pirrò
11:15-11:30am	GCN-based Explainable Recommendation using a Knowledge Graph and a Language Model	Jeongbin Lee, Kunyoung Kim, Mye Sohn, and Jongmo Kim
11:30-11:45am	Knowledge Graphs in Spatial-Temporal Cluster Evolution Analysis	Ivens Portugal, Paulo Alencar, and Donald Cowan
11:45-12:00pm	Force-directed graph embedding with hops distance	Hamidreza Lotfalizadeh and Mohammad Al Hasan
12:00pm-12:15pm	IoT-Reg: A Comprehensive Knowledge Graph for Real-Time IoT Data Privacy Compliance	Kelvin Echenim and Karuna Joshi

5th Financial Narrative Processing Workshop (FNP 2023) <i>Workshop Chairs: Dr Mo El-Haj</i>		
Time	Title	Presenter/Author
08:00 - 08:05	Opening Remarks	Dr Mo El-Haj – FNP 2023 General Chair
08:05 - 08:15	The Financial Narrative Summarisation Shared Task (FNS 2023)	Elias Zavitsanos, Aris Kosmopoulos, George Giannakopoulos, Marina Litvak, Blanca Carbajo-Coronado, Antonio Moreno-Sandoval, and Mo El-Haj

08:15 - 08:25	The Financial Document Causality Detection Shared Task (FinCausal 2023)	Antonio Moreno-Sandoval, Jordi Porta-Zamorano, Blanca Carbajo-Coronado, Doaa Samy, Dominique Mariko, and Mahmoud El-Haj
08:25 - 08:35	Advancements in Financial Document Structure Extraction: Insights from Five Years of FinTOC (2019-2023)	Juyeon Kang, Mauli Mehulkumar Patel, Anushka Agrawal, Simhadri Sevitha, Srinivasa R, Sandra Bellato, Anand Kumar M, Ngawang DEMPA TSANG, and Mo El-Haj
08:35 - 08:55	Automatic ESG Assessment of Companies by Mining and Evaluating Media Coverage Data: NLP Approach and Tool	Jannik Fischbach, Max Adam, Victor Dzhagatspanyan, Daniel Mendez, Julian Frattini, Oleksandr Kosenkov, and Parisa Elahidoost
08:55 - 09:15	Investigating Large Language Models for Financial Causality Detection in Multilingual Setup	Neelesh K Shukla, Raghu Katikeri, MSP Raja, Gowtham Sivam, Shlok Yadav, Amit Vaid, and Shreenivas Prabhakararao
09:15 - 09:35	Generative AI Approach to Distributed Summarization of Financial Narratives	Neelesh K Shukla, Raghu Katikeri, MSP Raja, Gowtham Sivam, Shlok Yadav, Amit Vaid, and Shreenivas Prabhakararao
09:35 - 09:55	Summarizing Financial Reports with Positional Language Model	Natalia Vanetik, Elizaveta Podkaminer, and Marina Litvak
10:00 - 10:20	Coffee Break	
10:20 - 10:40	Topic-Sentiment Analysis of Central Bank Press Conferences: BOJ Case Study	Kazuhiro Seki, Masahiko Shibamoto, and Takashi Kamihigashi
10:40 - 11:00	Identifying going concern issues in auditor opinions: link to bankruptcy events	Konstantinos Bougiatiotis, Elias Zavitsanos, and Georgios Paliouras
11:00 - 11:20	Uncovering Inconsistencies and Contradictions in Financial Reports using Large Language Models	Tobias Deußer, David Leonhard, Lars Hillebrand, Armin Berger, Mohamed Khaled, Sarah Heiden, Tim Dilmaghani, Bernd Kliem, Rüdiger Loitz, Christian Bauchhage, and Rafet Sifa
11:20 - 11:40	BBVA AI Factory at FinCausal 2023: RoBERTa Fine-tuned Model for Causal Detection	Alberto Algarra and David Muelas
11:40 - 12:00	Humans vs ChatGPT: Evaluating Annotation Methods for Financial Corpora	Jamshed Kaikous, Haoen Li, and Robert Brunner
12:00 - 12:20	Meticulously Analyzing ESG Disclosure: A Data-Driven Approach	Victor Yim, Yuxuan Zhang, Wenting Tan, Siu Ming Yiu, and Tak-Wah Lam,
12:20 - 12:40	Advanced NLP Techniques for Summarizing Multilingual Financial Narratives from Global Annual Reports	Dilshod Azizov, Jiyong Li, Hilal AlQuabeh, and Shangsong Liang

12:40 - 13:00	Impact Analysis of Social Events on Industries through Narrative Causal Search	Ryotaro Kobayashi, Yuri Murayama, and Kiyoshi Izumi
13:00 - 13:02	Closing Remarks and Discussion	Dr Mo El-Haj – FNP 2023 General Chair

Large-scale Data Utilization in Economics of Information and Management Sciences: Theory, Computation, and Experiment <i>WorkshopChairs: Naoki Watanabe</i>		
Time	Title	Presenter/Author
14:00-14:10	Opening Notes: Naoki Watanabe	
14:10-14:30	Conducting an Experiment at Multiple Sites with Small Subject Pools	Kazuhiro Ogawa, Yusuke Osaki, Tetsuya Kawamura, Hiromasa Takahashi, Satoshi Taguchi, Yoichiro Fujii, Kengo Kurosaka, Kohei Iyori, Naoki Watanabe
14:30-14:50	CultureBERT: Measuring Corporate Culture with Transformer-based Language Models	Sebastian Koch and Stefan Pasch
14:50-15:10	Toward a Novel Methodology in Economic Experiments: Simulation of the Ultimatum Game with Large Language Models	Ayato Kitadai, Yudai Tsurusaki, Yusuke Fukasawa, Nariaki Nishino
Coffee Break		
15:20-15:40	Port Arrival Reservation System Using Auctions for Fuel Consumption Reduction	Rintaro Rai, Takuya Nakashima, Nariaki Nishino
15:40-16:00	Mathematical Model Analysis of Photovoltaic-induced Land Use Transition	Yumi Watahiki, Hiroyasu Ando, Isamu Takahara
16:00-16:20	Efficiency in a College Admission Experiment: A Preliminary Simulation with Cognitive Ability Scores	Naoki Watanabe, Tetsuya Kawamura, Kazuhito Ogawa
Coffee Break		
16:30-16:50	Does Double-entry Bookkeeping Information Generated Using node2vec Contribute to Forecasting Future Performance?	Ryoki Motai, Masato Kamebuchi, Sora Watanabe, Ryo Matsumoto, Yukihiko Okada
16:50-17:10	Digital Finance, Market Competition, and Risk-Taking: A Study of Rural Commercial Banks in China	Chonghuang Hu, Minkang Li, Hufeng Yang, Minghao Li, Jichao Li, Jiang Jiang
17:10-17:30	Lower Alertness entails More Competition: Evidence from Prisoner's Dilemma and Coordination Games	Toshio Kokubo, Nobuhito Kon, Morimitsu Kurino, Wakuo Saito, Natsumi Shimada, Masashi Yanagisawa
17:30-17:50	Evaluating the Alleviation of Traffic Congestion through Bus rapid Transit Using Multi-agent Simulation	Zeyu Zhou, Mizuki Kobayashi, Uta Sato, Kazuma Akashi, Ayato Kitadai, Soma Sugihara, Yusuke Fukasawa, Masanori Fujita, Nariaki Nishino
17:50-18:00	Closing Remarks: Naoki Watanabe	

CyberHunt 2023 <i>PC-Chair: Tamas Bisztray</i> <i>Workshop Chairs: Vasileios Mavroeidis, Manos Athanatos, Konstantinos Lampropoulos</i>		
Time	Title	Presenter/Author
9:55-10:00	Opening Remarks	Vasileios Mavroeidis
10:00-10:30	Hide My Payload: An Empirical Study of Antimalware Evasion Tools	Hannes Holm and Erik Hyllienmark
10:30-11:00	A Modular Approach to Automatic Cyber Threat Attribution using Opinion Pools	Koen Teuwen
11:00-11:30	CERBERE: Cybersecurity Exercise for Red and Blue team Entertainment, REproducibility	Pierre-Victor Besson, Romain Brisse, H�el�ene Orsini, Natan Talon, Jean-Francois Lalande, Fr�ed�eric Majorczyk, Alexandre Sanchez, and Val�erie Viet Triem Tong
11:30-12:00	Automated Cyber Threat Intelligence Generation on Multi-Host Network Incidents	Cristoffer Leite, Jerry den Hartog, Daniel Ricardo dos Santos, and Elisa Costante
12:00-12:30	AGIR: Automating Cyber Threat Intelligence Reporting with Natural Language Generation	Filippo Perrina, Francesco Marchiori, Mauro Conti, and Nino Vincenzo Verde
12:30-14:00	Lunch Break	
14:00-14:30	Assessing the Threat Level of Software Supply Chains with the Log Model	Luis Soeiro, Thomas Robert, and Stefano Zacchiroli
14:30-15:00	ICS Honeypot Interactions: A Latitudinal Study	Francesco Lupia, Marco Lucchese, Massimo Merro, and Nicola Zannone
15:00-15:30	Machine Learning–Based Security Alert Screening with Focal Loss	Samuel Ndichu, Tao Ban, Takeshi Takahashi, and Daisuke Inoue
15:30-15:50	AMINet: An Industrial HoneyNet for AMI Systems	Alexios Lekidis , Georgios Daniil, Panagiotis Mavrommatis, Konstantinos Lampropoulos, and Odysseas Koufopavlou
15:50-16:00	Coffee Break	
16:00-16:20	Enhancing Cybersecurity Threat Intelligence Analysis: A Visual Approach with the Forensic Visualization Toolkit	Jihane Najar, Marinos Tsantekidis, Aris Sotiropoulos, and Vassilis Prevelakis
16:20-16:40	CVE representation to build attack positions graphs	Manuel Poisson, Val�erie Viet Triem Tong, Gilles Guette, Fr�ed�eric Guih�ery, and Damien Cr�emilleux
16:40-17:10	Deep Dive Research of Iranian Advanced Persistent Threats and Their Targets	Ryan Simons

17:10-17:40	Evaluating Representativeness in PDF Malware Datasets: A Comparative Study and a New Dataset	Ran Liu, Robert Joyce, Cynthia Matuszek, and Charles Nicholas
17:40-17:45	Closing Remarks	

International Workshop on Big Data Analytics for Climate Change Workshop Chairs: Prof. Rajiv Misra		
Workshop Date: 15/12/2023 Time: 14:00-18:30 PM		
Opening Remarks by Organizers (Time: 14.00-14.30)		
Time	Title	Presenter/Author
14.30- 14.50	<i>Interactive Visualization and Portable Image Blending of Massive Aerial Image Mosaics</i>	Steve Petruzza
14.50-15.10	<i>Evaluate and Compare Machine Learning Models for Temperature Forecasting of Meteorological Data in Hohhot.</i>	Ruyuan Han and Lei Yu
15.10-15.30	<i>TensorBank: Tensor Lakehouse for Foundation Model Training</i>	Romeo Kienzler
15.30-15.50	Estimating Water Storage from Images	Ajmal Shahbaz
15.50-16.10	An Early Warning System for Air Pollution Surveillance: A Big Data Framework to Monitoring Risks Associated with Air Pollution	Shahan Salim
16.10-16.40	Coffee Break	
16.40-17.00	<i>Analysis and Forecasting of Carbon Emission in SAARC Countries using Attention-based LSTM</i>	Anil Verma
17.00-17.20	<i>A Graph Data Model-based Micro-Provenance Approach for Multi-level Provenance Exploration in End-to-End Climate Workflows</i>	Fabrizio Antonio
17.20-17.40	Proximal Policy Optimization based computations offloading for delay optimization in UAV-assisted mobile edge computing	Praveen Kumar
17.40-18.00	Workload Shifting Based on Low Carbon Intensity Periods: A Framework for Reducing Carbon Emissions in Cloud	Shivani Tripathi
18.00-18.20	<i>Time Series Transformer for Long Term Rainfall Forecasting Towards Water Distribution Management in Smart Cities.</i>	Nelson Sharma,
18.20-18.30	Closing Remarks	

**First International Workshop on Machine Learning for securing IoT systems using
BigData**

Time	Title	Presenter/Author
14:05 – 14:30	<i>A Max-Min Security Game for Coordinated Backdoor Attacks on Federated Learning</i>	Omar Abdel Wahab and Anderson Avila
14:30 – 14:55	<i>One to rule them all: A study of requirement management tools supporting the development of modern AI-based software</i>	Abdul-Rasheed Ottun, Mehrdad Asadi, Michell Boerger, Nikolay Tcholtchev, Joao Fernando Ferreira Goncalves, Dušan Borovčanin, Bartłomiej Siniarski, and Huber Flores
Coffee Break		
15:10 – 15:35	<i>Adaptive Intrusion Detection Systems: Class Incremental Learning for IoT Emerging Threats</i>	Francesco Cerasuolo, Giampaolo Bovenzi, Christian Marescalco, Francesco Cirillo, Domenico Ciuonzo, and Antonio Pescapè
15:35 – 16:00	<i>A Novel Approach to Parallel Anomaly Detection: Application in Cybersecurity</i>	Zineb Ziani, Nahid Emad, and Ahmed Bouaziz
16:00 – 16:05	Closing Remarks	

AI and Adaptive Computing for Edge Sensing and Processing
Workshop Chairs: Dr. Michael Barton and Dr. Venkat Dasari

Time	Title	Presenter/Author
8:00	Opening Remarks	
8:05	Thoughts on Edge Sensing and Processing	Dr. Michael Barton
8:30	Anomaly Detection as a Data Reduction Approach for Test Event Analysis at the Edge	Mariya Occorso
8:55	Deep learning acceleration at the resource-constrained tactical edge	Brian Rapp
9:20	Predictive Modeling of Run Time for Model and Data Distributed Inferencing Using Gradient Boosting Regression	Cleon Anderson
9:45	Coffee Break	
10:05	Measuring Data Transmissions from the Edge for Distributed Inferencing with gRPC	Scott Brown
10:30	Real-Time Camera-to-Lidar Calibration for Autonomous Robotic Systems at the Edge	Dr. Venkat Dasari
10:55	Performance evaluation of 3D point cloud matching with shortrange dense 2D range sensor	Prof. Ju Wang
11:20	Enhancing Edge Intelligence with Highly Discriminant LNT Features	Prof. Xinyu Wang
11:45	Closing Remarks	

BigCyber – 2023
Date: December 16, 2023
Time Zone: Sorrento, Italy UTC/GMT +1 hour (14:00 – 18:00 CET)
Workshop Chairs: Karuna Pande Joshi, Sudip Mittal, Rajeev Agrawal, and Lavanya Elluri

Opening Remarks		
Time	Title	Presenter/Author
14:00 – 14:25	Analyzing Data Sets for ML-driven Fraud Detection in SAP Systems	Jonas Schnepf, Bernd Scheuermann, and Paula Vetter
14:25 – 14:50	ODTT: Optimized Dynamic Taxonomy Tree with Differential Privacy	Yijie Gui, Qizhi Chen, Wensheng Gan, and Yongdong Wu

14:50 – 15:15	Distributed Continual Intrusion Detection: A Collaborative Replay Framework	Kamil Faber, Bartłomiej Sniezynski, and Roberto Corizzo
15:15 – 15:40	EEG Signal-Based Authentication: A Performance Evaluation of Feature Extraction and Classification Techniques	Rahul Nagarajan, Malemsana Thokchom, Abdullah Irfan Siddiqui, and Mohammed Iftexhar Husain
15:40 – 16:05	IoT Botnet-Traffic Classification Using Few-Shot Learning	Davide Di Monda, Giampaolo Bovenzi, Antonio Montieri, Valerio Persico, and Antonio Pescapè
16:05 – 16:20	Coffee Break	
16:20 – 16:45	Hierarchical Federated Transfer learning and Digital Twin Enhanced Secure Cooperative Smart Farming	Lopamudra Praharaj, Maanak Gupta, and Deepti Gupta
16:45 – 17:10	Pruning Federated Learning Models for Anomaly Detection in Resource-Constrained Environments	Simone Magnani, Stefano Braghin, Ambrish Rawat, Roberto Doriguzzi-Corin, Mark Purcell, and Domenico Siracusa
17:10 – 17:35	An Experimental Study on Random Projection Based Biometric Security	Rishabh Shukla and Harkeerat Kaur
17:35 – 18:00	Improving Fingerprint Classification Accuracy Using Image Enhancement Deep Learning Models	Nikita Dalvi, Min Kyung An, ABM Rezbau Islam, and Van Vung Pham
	Closing Remarks	

Workshop AIDA (AI-Driven Agriculture: opportunities and challenges) December 17, 2023 Workshop Chairs: Vijaypal Singh Dhaka, Geeta Rani, Eugenio Vocaturo, Ester Zumpano		
Time	Title	Presenter/Author
8:15	Workshop Introduction	
	Session 1 (hybrid) Chair: Eugenio Vocaturo	
8:15-8:30	S24209 <i>AI-Driven Agriculture: Opportunities and Challenges</i>	Eugenio Vocaturo, Geeta Rani, Vijaypal Singh Dhaka, and Ester Zumpano,
8:30-8:45	S24204 <i>From Satellites to Fields: Machine Learning Applications for Prediction of Corn Production Using NDVI, Precipitation and Land Surface Temperature for Large Producer Countries</i>	Saniya Nangia, Thilanka Munasinghe, Heidi Tubbs, and Assaf Anyamba
8:45-9:00	S24205 <i>Integrating Climate Variable Data in Machine Learning Models for Predictive Analytics of Tomato Yields in California</i>	Tianze Zhu, Junyi Wu, Harry Tan, Bill Wang, Thilanka Munasinghe, Heidi Tubbs, and Assaf Anyamba,
9:00-9:15	S24208 <i>Precision Grazing: when Agriculture, Livestock and Technology unite</i>	Oscar Tamburis, Mario Magliulo, Adriano Tramontano, Giulio Perillo, Arriel Benis, and Serena Calabrò,
9:15-9:30	S24210 <i>Crop Loss Estimation in Maize Agriculture: A Deep Learning Perspective</i>	Geeta Rani, Vijaypal Singh Dhaka, Eugenio Vocaturo, and Ester Zumpano,
9:30 – 9:45	S24211 <i>Synergizing Measurement Science and Artificial Intelligence in Smart Agriculture</i>	Francesco Lamonaca and Domenico Luca Carni,
10:00-10:30	Coffee Break	
10:30-11:00	Invited Talk: Oscar Tamburis Oscar Tamburis: Cultivating the Future: Pioneering the Landscape of Precision Agriculture	
	Session 2 (in presence) Chair: Eugenio Vocaturo	
11:00- 11:15	BigD409 <i>A low-cost IoT-based Smart Farming System For Crop Recommendation and Resource Management</i>	Daniel Timko, Adityan Elangovan, Aruna Elangovan, Mike Sharko, and Ali Ahmadinia,

11:15 – 11:30	BigD478 <i>Artificial Intelligence-Based Plant Breeding using Genotype and Phenotype Data: Methods and Future Work</i>	Jiho Choi, Sung-Woo Byun, Taehoon Lim, Hye In Lee, Hwa Seon Shin, Geon Woo Kim, Jin-Kyung Kwon, and Byoung-Cheorl Kang,
11:30- 11:45	S24212 <i>Tracking and Predicting Productions in Agricultural Processes: Applications and Experiences</i>	Patrizia Vizza, Giuseppe Timpano, Francesco Vescio, Gianmichele Caligiuri, Fulvia Caligiuri, Pasquale Lambardi, Pierangelo Veltri, Pietro Hiram Guzzi, and Giuseppe Tradigo,
Session 3 (hybrid) Chair: Eugenio Vocaturo		
11:45 – 12:00	S24203 <i>Deep Machine Learning on Segmenting and Classifying Crop Images Taken by Unmanned Aerial Vehicle</i>	Dan Lo, Bobin Deng, and Yong Shi,
12:00 – 12:15	S24202 <i>Transforming Agriculture with Intelligent Data Management and Insights</i>	Yu Pan, Jianxin Sun, Hongfeng Yu, Geng Bai, Yufeng Ge, Joe Luck, and Tala Awada,
12:15 – 12:30	S24207 <i>Visualization of 3D Hyperspectral Soil Mapping Data via Autoencoder-based Clustering</i>	Jianxin Sun, Xinyan Xie, Yu Pan, Yakub Islamov, Yufeng Ge, and Hongfeng Yu,
Closing Remarks		

International Workshop on Data Engineering and Modeling for AI (DEMAI)		
<i>Workshop Chairs: Carlos Ordonez, Ladjel Bellatreche</i>		
Time	Title	Presenter/Author
14:30	Welcome, program overview	Chairs
14:35	Combining fault-tolerant persistence and low-latency streaming access to binary data for AI models	Gabriele Scaffidi Militone
14:55	Using Data Enrichment to Extend Urban Data with High-quality Geospatial Data for Advanced City Planning: a Pilot Study	Dessislava Petrova-Antonova
15:15	A multi-source graph database to showcase a recommender system for dyslexic students	Karim El Hage
15:35	Coffee Break	
16:00	Panel: how can modern database systems help AI.?	4 invited speakers + moderator
17:00	LLMs with User-defined Prompts as Generic Data Operators for Reliable Data Processing	Online: Luyi Ma
17:10	Fast Meta Failure Recovery for Federated Meta-Learning	Online: Hailu Xu
17:20	Open floor discussion on DEMAI scope, submitted/accepted papers, DKE special issue	Chairs
17:40	Closing Remarks: DEMAI next year (PC, DKE)	

7th International Workshop on Big Data Analytics for Cyber Intelligence and Defense (BDA4CID)		
<i>Stephen McGough, Amir Atapour-Abarghouei, David Wall</i>		
Time	Title	Presenter/Author
08:00 – 8:20	Welcome	
8:20 – 8:45	Exploring the Distinctive Tweeting Patterns of Toxic Twitter Users	Hina Qayyum, Muhammad Ikram, Benjamin Zi Hao Zhao, Ian Wood, Nicolas Kourtellis, and Mohamed Ali Kaafar,

8:45 – 9:10	On mission Twitter Profiles: A Study of Selective Toxic Behavior	Hina Qayyum, Muhammad Ikram, Benjamin Zi Hao Zhao, Ian Wood, Nicolas Kourtellis, and Mohamed Ali Kaafar
9:10 – 9:35	Improving Cybersecurity Awareness: Tweet Classification using Multilingual Sentence Embeddings and Contextual Features	Anastasia Cotov, Carlo Bono, Cinzia Capiello, and Barbara Pernici
9:35 – 10:00	Clean-label Poisoning Attack against Fake News Detection Models	Jiayi Liang, Xi Zhang, Yuming Shang, Sanchuan Guo, and Chaozhuo Li
10:00 – 10:20	Coffee Break	
10:20 – 10:45	Defending Federated Learning Against Model Poisoning Attacks	Ibraheem Aloran and Saeed Samet
10:45 – 11:10	A Cascade CNN Model based on Adaptive Learning Rate Thresholding for Reliable Face Recognition	Imen Labiadh, Larbi Bouchir, and Hassene Seddik
11:10 – 11:35	Transformer-based LLMs in Cybersecurity: An in-depth Study on Log Anomaly Detection and Conversational Defense Mechanisms	Prasasthy Balasubramanian, Justin Seby, and Panos Kostakos
11:35 – 12:00	Complementary Attention-Based Deep Learning Detection of Fake Faces	Supriyo Sadhya and Xiaojun Qi
12:00 – 12:15	Closing Remarks	

2nd International Workshop on Big Data Analytics for Health and Medicine (BDA4HM) <i>Stephen McGough, Matthew Forshaw and Amir Atapour Abarghouei</i>		
Time	Title	Presenter/Author
14:00 – 14:05	Welcome	
14:05 – 14:25	Data Poisoning Attacks over Diabetic Retinopathy Images Classification	Marcello Di Giammarco, Francesco Mercaldo, Antonella Santone, and Fabio Martinelli
14:25 – 14:45	Towards automatic identification of self-reported COVID-19 tweets: Introducing a multilingual manually annotated dataset, baseline systems and exploratory evaluations	Ramya Tekumalla, Luis Alberto Robles Hernandez, and Juan Banda
14:45 – 15:05	A Novel Ensemble-Based Framework for Feature Identification and Classification of COVID-19 Electronic Health Record Data	Asmita Mahajan and Durga Toshniwal
15:05 – 15:25	Forecasting COVID-19 Hotspots in Florida Public Schools: A Machine Learning Approach for Informed Decision-Making	Mingming Peng, Hongmei Chi, and Askal Ali
15:25 – 15:45	Enhancing Vocal-Based Laryngeal Cancer Screening with Additional Patient Information and Voice Signal Embedding	Jaemin Song, Yong Oh Lee, Seho Park, Youn Kyu Lee, Hansang Park, and Hyun-Bum Kim
15:45 – 16:05	Recent Artificial Intelligence Advances in Detection and Diagnosis of Sickle Cell Disease: A review	Abdourahmane Balde, Aweve Bassene, Lamine Faty, Mamadou Soumboundou, Ousmane Sall, and Youssou Faye
16:05 – 16:20	Coffee Break	
16:20 – 16:40	Exploring the Value of Pre-trained Language Models for Clinical Named Entity Recognition	Samuel Belkadi, Lifeng Han, Yuping Wu, and Goran Nenadic
16:40 – 17:00	Interpretable and robust hospital readmission predictions from Electronic Health Records	Hugo Calero, Rebeen Hamad, Christian Atallah, John Casement, Dexter Canoy, Nick Reynolds, Michael Barnes, Paolo Missier, and The AI-MULTIPLY Consortium,
17:00 – 17:20	NCL-SM: A Fully Annotated Dataset of Images from Human Skeletal Muscle Biopsies	Atif Khan, Conor Lawless, Amy Vincent, Charlotte Warren, Valeria Di Leo, Tiago Gomes, and A. Stephen McGough
17:20 – 17:40	How much data do I need? A case study on medical data	Ayse Betul Cengiz and Andrew Stephen McGough
17:40 – 18:00	Graph Encoding-Enhanced Transformer for Drug Recommendation	Xunsheng Cai, Syaui Thamrin, and Arbee Chen
18:00 – 18:10	Closing Remarks	

3rd International Workshop on Big Data Analytics for Sustainability (BDA4S) <i>Stephen McGough, Matthew Forshaw, Gavin Shaddick, Hao Dong</i>		
Time	Title	Presenter/Author

14:00 – 14:05	Welcome	
14:05 – 14:25	Explainable Deep Learning for Smart Grid Stability Detection	Giovanni Ciaramella, Fabio Martinelli, Francesco Mercaldo, and Antonella Santone
14:25 – 14:45	The Forecastability of Underlying Building Electricity Demand from Time Series Data	Mohamad Khalil, A. Stephen McGough, Hussain Kazmi, and Sara Walker
14:45 – 15:05	Forecasting Resource Demand for Dynamic Datacenter Sizing in Telco Infrastructures	Dimitra Paranou, Angelos Pentelas, Dimitris Katsiros, Konstantinos Maidatsis, George Giannopoulos, Evangelos Angelou, Nikos Anastopoulos, and George Papastefanatos
15:05 – 15:25	Natural Language Processing to Understand Human Activities Impacted by Hydroelectric Energy Projects	Keshava Pallavi Gone, Yan Chen, and Michael Smit
15:25 – 15:45	Wireless Sensor Networks Calibration using Attention-based Gated Recurrent Units for Air Pollution Monitoring	Shagufta Henna, Asif Yar, and Kazeem Saheed
15:45 – 16:05	A Methodology and a Toolbox to Explore Dataset related to the Environmental Impact of HTTP Requests	Christophe Cerin, Mathilde Jay, Laurent Lefevre, and Denis Trystram
16:05 – 16:30	Coffee Break	
16:30 – 16:50	Detection of methane plumes using Sentinel-2 satellite images and deep neural networks trained on synthetically created label data	Maciel Zortea, Joao Lucas de Sousa Almeida, Levente Klein, and Alberto Costa Nogueira Junior
16:50 – 17:10	Energy-Aware Query Processing: A Case Study on Join Reordering	Ladje Bellatreche, Fouad Djellali, Wojciech Macyna, and Carlos Ordenez
17:10 – 17:30	Is Active Learning Green? An Empirical Study	Shirin Salehi and Anke Schmeink
17:30 – 17:50	Explainable Long-Term Forecasting of Air Pollution	Abdul Mutakabbir and Samuel A. Ajila
17:50 – 18:10	Counterfactual Analysis: A Case Study on Impact of External Events on Building Energy Consumption	Carolina Minami Oguchi, Dipak Ghosal, Alex Sim, and Kesheng Wu
18:10 – 18:20	Closing Remarks	

BigData Applications for Fights against Crime and Terrorism (DBA4FCT)		
<i>WorkshopChairs: Georgios Stavropoulos – Konstantinos Votis</i>		
Time	Title	Presenter/Author
14:00 – 14:15	Workshop introduction	Georgios Stavropoulos
14:15 – 14:35	Cybersecurity in Public Space: Leveraging CNN and LSTM for Proactive Multivariate Time Series Classification	Aimen Ahmed AL Odaini, Francesco Zola, Lander Segurola, Amaia Gil, Carmen D'Andrea
14:35 – 14:55	Visual inspection for illicit items in X-ray images using Deep Learning	Georgios Th. Papadopoulos
14:55 – 15:15	Harvesting Large Textual and Multimedia Data to Detect Illegal Activities on Dark Web Marketplaces	Georgia Chatzimarkaki, Sophia Karagiorgou, Mariza Konidi, Dimitrios Alexandrou, Thanassis Bouras, Spyridon Evangelatos
15:15 – 15:35	Visual Data Engineering for Conflict and Terrorism Prediction	Antonella Calo, Matteo Lia, Marco Zappatore, Antonella Longo
15:35 – 15:55	Self-supervised visual learning for analyzing firearms trafficking activities on the Web	Georgios Th. Papadopoulos
15:55 – 16:15	Coffee break	
16:15 – 16:35	Vision Paper: Uncovering Illegal Firearm Transactions in Cryptocurrency Networks	Anastasia Kassiani Blitsi
16:35 – 16:55	The Nexus Between Big Data Analytics and the Proliferation of Fake News as a Precursor to Online and Offline Criminal Activities	Spyros Evangelatos, Thanasis Papadakis, Nikolaos Gousetis, Christos Nikolopoulos, Petrina Troulitaki, Nikos Dimakopoulos, George Bravos, Michael V. Lo Giudice, Ali Shadma, and Alberto Aziani
16:55 – 17:15	Unveiling Conversational Patterns: Intent Classification and Clustering in Reddit's Firearm Trade Community	Maria Makrynioti
17:15 – 17:35	General Risk Index: A Measure for Predicting Violent Behavior Through Written Communication	Lisa Kaati, Amendra Shrestha, and Nazar Akrami

17:35 – 17:55	Investigating Visual Analytics against Terrorist Financing in Dark Web Marketplaces	Georgios Th. Papadopoulos
17:55 – 18:10	Closing remarks	Georgios Stavropoulos

1st International Workshop on Dataspaces for Digital Twins of Cities Critical Infrastructures (DS4DTCCI) <i>Workshop Chairs: Antonella Longo, Marco Zappatore</i>		
Time	Title	Presenter/Author
09:00 – 09:20	[S33201] Digital Twin supporting Blockchain in construction supply chain: from bio-based materials to energy efficiency and L.C.A.	<u>Angelica Rocco</u>
09:20 – 09:40	[S33206] Generating large-scale human flow datasets from measured pedestrian movement data and simulation	<u>Mei Takeda</u> , Masaki Onishi
09:40 – 10:00	[S33209] Digital Twin Space: The Integration of Digital Twins and Data Spaces	<u>Alessandra Somma</u> , Alessandra De Benedictis, Marco Zappatore, Cristian Martella, Angelo Martella, Antonella Longo
10:00 – 10:20	[S33208] CkanFAIR: a digital tool for assessing the FAIR principles	<u>Matteo Lia</u> , Davide Damiano Colella
10:20 – 10:40	Break	
10:40 – 11:00	[S33202] Supply-Demand Analysis of Urban Amenities Based on Walking Accessibility	<u>Kaloyan Karamitov</u> , Dessislava Petrova-Antonova, Emil Hristov, Milena Borukova
11:00 – 11:20	[S33210] Identifying key factors in designing data spaces for Urban Digital Twin Platforms: a data driven approach	Cristian Martella, <u>Angelo Martella</u> , Amro Issam Hamed Attia Ramadan
11:20 – 11:40	[S33211] Cases Vs Deaths: Which Indicators To Assess The Effectiveness Of Non-Pharmaceutical Interventions During Covid-19 Pandemic?	<u>Divya Pragna Mulla</u> , Mario Alessandro Bochicchio, Antonella Longo
11:40 – 12:00	[S33212] Advancing Resilience in Green Energy Systems: Comprehensive Review of AI-based Data-driven Solutions for Security and Safety	<u>Amro Issam Hamed Attia Ramadan</u> , Ali Aghazadeh Ardebili, Antonella Longo, Antonio Ficarella
12:00 – 12:15	Closing Remarks	

LLM/FM 2023: From Theory to Practice: Workshop on Large Language and Foundation Models Dhaval Patel, Rafet Sifa		
Time	Title	Presenter/Author
	Welcome	
		Dhaval Patel, Rafet Sifa
8:00 AM : 8:15 AM	<i>Wealth of Nations, Wealth of Data: How GDP Shapes Diverse Large Language Models like ChatGPT</i>	Alex Kaplunovich
8:15 AM : 8:30 AM	<i>Enabling Dataspaces Using Foundation Models: Technical, Legal and Ethical Considerations and Future Trends</i>	Mohan Timilsina
8:30 AM : 8:45 AM	<i>Model-as-a-Service (MaaS): A Survey</i>	Wensheng Gan, Shicheng Wan, and Philip S. Yu
8:45 AM : 9:00 AM	<i>TRANSQLATION: TRANSformer-based SQL Recommendation</i>	Shirin Tahmasebinotarki, Amir H. Payberah, Ahmet Soylu, Dumitru Roman, and Mihhail Matskin
9:00 AM : 9:15 AM	<i>GPT-in-the-Loop: Supporting Adaptation in Multiagent Systems</i>	Nathalia Nascimento, Paulo Alencar, and Donald Cowan
	Coffee Break	
9:30 AM : 9:45 AM	<i>Hallucination-minimized Data-to-answer Framework for Financial Decision-makers</i>	Sohini Roychowdhury, Andres Alvarez, Brian Moore, Marko Krema, Maria Paz Gelpi, Federico Martin Rodriguez, Angel Rodriguez, Jose Ramon Cabrejas, Pablo Martinez Serrano, Punit Agrawal, and Arijit Mukherjee

9:45 AM : 10:00 AM	<i>Unsupervised Style Transfer of Modern Hebrew using Generative Language Modeling and Zero-Shot Prompting</i>	Pavel Kaganovich, Ophir Munz-Manor, and Elishai Ezra Tsur
10:00 AM : 10:15 AM	<i>Towards Automated Regulatory Compliance Verification in Financial Auditing with Large Language Models</i>	Armin Berger, Lars Hillebrand, David Leonhard, Tobias Deußer, Thiago Bell Felix de Oliveira, Tim Dilmaghani, Mohamed Khaled, Bernd Kliem, Rüdiger Loitz, Christian Bauckhage, and Rafet Sifa
10:15 AM : 10:30 AM	<i>Comparing Generative Chatbots Based on Process Requirements: A Case Study</i>	Luis Fernando Lins, Nathalia Nascimento, Paulo Alencar, Toacy Oliveira, and Donald Cowan,
10:30 AM : 10:45 AM	<i>Generating Prototypes for Contradiction Detection Using Large Language Models and Linguistic Rules</i>	Maren Pielka, Svetlana Schmidt, and Rafet Sifa
10:45 AM : 11:00 AM	<i>Anaphoric Ambiguity Resolution in Software Requirement Texts</i>	savas yildirim, Mucahit Cevik, sanaz Mohammad Jafari, and Ayse Başar
Closing Remarks		

Workshop AI-Powered Renewable Energy Forecasting: Techniques and Challenges December 17, 2023		
Workshop Chairs: Luciano Caroprese, Sergio Montelpare, Mariano Pierantozzi, and Ester Zumpano		
Time	Title	Presenter/Author
8:30	Workshop Introduction	
Session 1 (in presence) Chair: Luciano Caroprese		
8:30-8:45	S32201 <i>Embedding Climate Dynamics and Prediction with Deep Learning for Wind Power Forecasting: Short-Term to Long-Term Perspective</i>	Hana Kim, Yong Oh Lee, Changsoo Ok, Dongkyun Kim, and Seungyup Baek,
8:45-9:00	S32202 <i>Windfarm Forced Oscillation Detection Using Hyperdimensional Computing</i>	Shyam Yathirajam, Arash Peighambari, Ruben Roberts, Hamed Nademi, Sreedevi Gutta, Justin Morris, and Ali Ahmadinia,
09:00-9:15	S32212 <i>Navigating the Future Data-Driven Automation Tools: State-of-the-Art and Research Roadmap for Digital Twins of Energy Systems</i>	Ali AGHAZADEH ARDEBILI, Antonella Longo, and Antonio Ficarella,
9:15 – 9:30	S32211 <i>A Big Data Platform for the Management of Local Energy Communities Data</i>	Sonia Bergamaschi and Luca Gagliardelli,
9:30 – 9:45	S32210 <i>A Deep Learning Approach for Climate Parameter Estimations and Renewable Energy Sources</i>	Camilla Lops, Mariano Pierantozzi, Luciano Caroprese, and Sergio Montelpare,
9:45 – 10:00	Invited Talk: Eugenio Vocaturo <i>Unlocking the Potential of Artificial Neural Networks in Dye Absorption Prediction</i>	
10:00-10:30	Coffee Break	
Session 2 (online) Chair: Ester Zumpano		
10:30 – 10:45	S32209 <i>A focuses review of ANN-based models for Predicting Absorption Maxima (λ_{max}) of Dyes</i>	Geeta Rani, Neeraj Tomar, Vijaypal Singh Dhaka, Praveen K. Surolia, Eugenio Vocaturo, and Ester Zumpano,
10:45 – 11:00	S32204 <i>An Integrated ML-Ops Framework for Automating AI-based Photovoltaic Forecasting</i>	Symeon Chorozioglou, Elissaios Sarmas, and Vangelis Marinakis,
11:00 – 11:15	S32207 <i>A Power Quality Event Classifier Based on Convolutional Neural Network</i>	Francesco Lamonaca and Domenico Luca Carni,

11:15 – 11:30	S32208 <i>Secure and Energy Efficient Filtered Over-the-Air Internet of Things Setup in a Wireless Mesh Network for Firmware Freshness</i>	Lorenzo Carnevale, Annamaria Ficara, Gianluca Catalfamo, Antonino Galletta, Maria Fazio, and Massimo Villari,
11:30 – 11:45	S32203 <i>Enhanced Segmentation of PV Arrays in Infrared Images using an Improved SegFormer Approach</i>	Wanghu Chen, Shengfang Jin, Yihua Luo, and Jing Li,
11:30 – 11:45	S32205 <i>Physics Fundamentals of an Internet of Nanomedicine Things</i>	Huber Nieto-Chaupis,
11:30 – 11:45	S32206 <i>Kirchhoff's Voltage Law at Neural Synapse From Electric Currents Based at Neurotransmitters</i>	Huber Nieto-Chaupis,
Closing Remarks		

IEEE Big Data Workshop on Multimodal Artificial Intelligence (MMAI 2023)
Dec. 16 10:30-18:00
(Conference Room: Nettuno 3)
Workshop Chair: Duoduo Liao
Web link: https://www.comstar-tech.org/workshops/2023/workshop_2023_MMAI.html

Time (GMT+1)	Title	Presenter/Author
Opening Remarks		
Session I 10:30 – 12:30	LoRA-like Calibration for Multimodal Deception Detection using ATSTFace Data	Shun-Wen Hsiao and Cheng-Yuan Sun
	Multimodal Large Language Models: A Survey	Jiayang Wu, Wensheng Gan, Zefeng Chen, Shicheng Wan, and Philip S. Yu
	Semantic Prompt Based Multi-Scale Transformer for Few-Shot Classification	Hongwu Liu, Shouhong Wan, Peiquan Jin, and Xin Wang
	Impact of Mixed Multimodalities and Size Dependence on Performance of Object Detection on Multimodal Satellite Imagery	Yuri Gordienko, Nikita Gordienko, Oleksandr Rokovyi, Oleg Alienin, Andrii Polukhin, and Sergii Stirenko
	Neural Crystals	Sofia Karamintziou, Thanassis Mavropoulos, Dimos Ntioudis, Georgios Meditskos, Stefanos Vrochidis, and Ioannis (Yiannis) Kompatsiaris
	CLIP-PubOp: A CLIP-based Multimodal Representation Fusion Method for Public Opinion	Zhibo Wang, Yi Guo, and Jiaojiao Fu
	Audio-visual Neural Face Generation with Emotional Stimuli	Juheon Hwang and Jiwoo Kang
	Lunch Break	
Session II 14:00 – 16:00	De-SaTE: Denoising Self-attention Transformer Encoders for Li-ion Battery Health Prognostics	Gaurav Shinde, Rohan Mohapatra, Pooja Krishan, and Saptarshi Sengupta
	Multimodal One-class Learning for Malicious Online Content Detection	Roberto Corizzo, Nora Lewis, Lucas P. Damasceno, Allison Shafer, Charles C. Cavalcante, and Zois Boukouvalas
	Exploiting Multiple Sequence Lengths in Fast End to End Training for Image Captioning	Jia Cheng Hu, Roberto Cavicchioli, and Alessandro Capotondi
	Evaluating CLIP: Understanding on Relationships in a Blocks World	Kairui Zhang and Martha Lewis
	New Finger Photo Databases with Presentation Attacks and Demographics	Anudeep Vurity and Emanuela Marasco
	Understanding the Language of ADHD and Autism Communities on Social Media	Niloofar Kalantari, Amirreza Payandeh, Marcos Zampieri, and Vivian Genaro Motti
	Gender Classification Accuracy via Two-Dimensional Body Joints using Convolutional Neural Networks	Cheng-En Sung and Nada Attar
Coffee Break		

Session III 16:00 – 18:00	Late Fusion-based Distributed Multimodal Learning	Flavio Giobergia and Elena Baralis
	A Supervised Autoencoder for Human Activity Recognition with Inertial Sensors	Jaehyeok An, Younghoon Kwon, and Yoon-Sik Cho
	Using the CARLA Simulator to Train A Deep Q Self-Driving Car to Control a Real-World Counterpart on A College Campus	Joseph May, Khem Poudel, Samir Poudel, Sammi Hamdan, and Jorge Vargas
	Enhancing Scientific Image Classification through Multimodal Learning: Insights from Chest X-Ray and Atomic Force Microscopy Datasets	David Meshnick, Nahal Shahini, Debargha Ganguly, Yinghui Wu, Roger French, and Vipin Chaudhary
	Character-based Outfit Generation with Vision-augmented style extraction via LLMs	Najmeh Forouzandehmehr, Yijie Cao, Nikhil Thakurdesai, Ramin Giahi, Luyi Ma, Nima Farrokhsiar, Jianpeng Xu, Evren Korpeoglu, and Kannan Achan
	Predicting Potential School Shooters from Social Media Posts	Alana Ceden, Rachel Liang, and Sheikh Rabiul Islam
Closing Remarks		

1st Workshop on AI Music Generation (AIMG 2023) Dec. 17 14:00-18:00 <i>Workshop Chair: Callie Liao, Lindi Liao</i> (Conference Room: Ravello) <i>Web link: https://www.intellisky.org/workshops/workshop_AIMG2023.html</i>		
Time (GMT+1)	Title	Presenter/Author
Session I 14:00 – 14:50	Opening Remarks	
	Musical Elements Enhancement and Image Content Preservation Network for Image to Music Generation	Wenzhao Liu and Dechao Meng
	AI Music Showcase	
	Things, Objects, Subjects and Stuff: IoMuSt and Ubimus Perspectives on AI	Marcello Messina and Luzilei Aliel
Session II 14:50 – 16:20	Equipping Pretrained Unconditional Music Transformers with Instrument and Genre Controls	Weihan Xu, Julian McAuley, Shlomo Dubnov, and Hao-Wen Dong
	Automatic Time Signature Determination for New Scores Using Lyrics for Latent Rhythmic Structure	Callie Liao, Duoduo Liao, and Jesse Guessford
	AI-Algorithmically-Generated Song with Lyrics	Callie Liao
	AI Music Showcase	
	Music Generation using Human-In-The-Loop Reinforcement Learning	Aju Ani Justus
	Music Generation Using Deep Learning	Shanmukh Krishna B, Satya Sai Roopa Sree Chiluvuri, Sai Sri Harshini Kosuri, Sai Sree Harsha Chimbili, and Mahima Agumbe Suresh
Session III 16:20 – 15:30	Snake in the Labyrinth: Scenes from the Machine's Deep Q-Learning Experience	Jeffrey Morris
	AI Music Showcase	
	Let the "perfect voice" always be there, positive affirmation and negative anxiety from online commentary	Yingzixuan Zhang, Kaixuan Niu, and Zhian Zhao
Closing Remarks & Award Announcements		

The 7th Workshop on Graph Techniques for Adversarial Activity Analytics (GTA³ 2023)
Workshop Chairs: Jiejun Xu, Hanghang Tong, Andrea Bertozzi, Vince Lyzinski, George Chin, Hang Liu, Tyler Derr

Time (CET)	Title	Presenter/Author
14:50	Opening Remarks	Workshop organizers
15:00	Keynote 1: Data-Centric AI for Real-World Graph Applications	Prof. Tyler Derr (Vanderbilt)
15:40	Keynote 2: Ultra-Low-Latency Graph Neural Networks: Applications and Implementations	Prof. Callie Hao (Georgia Tech)
16:20	AutoKG: Efficient Automated Knowledge Graph Generation for Language Models	Bohan Chen and Andrea Bertozzi
16:35	Hate Speech And Hate Crimes: A Data-Driven Study Of Evolving Discourse Around Marginalized Groups	Malvina Bozhidarova, Jonathn Chang, Aaishah Ale-Rasool, Yuxiang Liu, Chongyao Ma, Andrea Bertozzi, Jeffrey Brantingham, Junyuan Lin, and Sanjukta Krishnagopal
16:50	Coffee Break	
17:00	Keynote 3	Prof. Sameer Singh (UCI)
17:40	Keynote 4: High-Performance Intelligent Big Data Analytics	Prof. Hang Liu (Rutgers)
18:20	Hybrid Attack Graph Generation with Graph Convolutional Deep-Q Learning	Sam Donald, Rounak Meyur, and Sumit Purohit
18:35	Learning Explainable Multi-view Representations for Malware Authorship Attribution	Irsyad Adam, Alex Waagen, Dana Warmesley, and Jiejun Xu
18:50	Closing	

Third International Workshop on Data science for equality, inclusion and well-being challenges

Workshop Chairs: Tania Cerquitelli, Genoveva Vargas-Solar, Arianna Montorsi, Claudia De Giorgi

Session Chair: Greta Temporin

December 15th, 2023 – 14:00-18:00

Time	Title	Presenter/Author
14:00 – 14:15	Opening	
14:15 – 14:30	Recommendation fairness and where to find it: An empirical study on fairness of user recommender systems Antonela Tommasel and Ira Assent	Antonela Tommasel
14:30 – 14:45	GINN: Towards Gender InclusioNeural Network Matteo Berta, Bartolomeo Vacchetti, and Tania Cerquitelli,	Matteo Berta
14:45 - 15:00	Aiming to Minimize Alcohol-Impaired Road Fatalities: Utilizing Fairness-Aware and Domain Knowledge-Infused Artificial Intelligence Tejas Venkateswaran, Sheikh Rabiul Islam, Md Golam Moula Mehedi Hasan, and Mohiuddin Ahmed	Sheikh Rabiul Islam
15:00 - 15:15	Assessing relative contribution of Environmental, Behavioural and Social factors on Life Satisfaction via mobile app data Gregor Milligan, John Harvey, Liz Douthwaite, Elvira Perez Vallejos, Georgiana Nica-Avram, and James Goulding	Gregor Milligan

15:15 - 15:30	Developing a Large-Scale Language Model to Unveil and Alleviate Gender and Age Biases in Australian Job Ads Ruochen Mao, Liming tan, and Rezza Moieni	Ruochen Mao
15:30 – 15:45	Introducing Computational Thinking in Middle-Schools using a Culturally-responsive Game through a Researcher-Practitioner Partnership Ismael Villanueva-Miranda, Katherine Mortimer, Monika Akbar, Romelia Rodriguez Reyes, Cynthia Ontiveros, Scott Gray, Pedro Delgado, Victor Medrano, Melissa Anderson, Jacob Ramirez, and Jesus Vazquez	Monika Akbar
15:45 - 16:00	Towards organizational change: a framework for evaluating trends and approaches in Gender Equality Plans Greta Temporin and Alessandra Colombelli,	Greta Temporin
16:00-16:30	Coffee Break	
16:30 - 16:45	A Perspective on Data Categorization with Regard to Equity, Diversity, and Inclusion in Data Science Cécile Favre and Marie Vialaret	Cécile Favre
16:45 - 17:00	Mitigating Representation Bias in Data Transformations: a Constraint-based Optimization Approach Barbara Catania, Giovanna Guerrini, and Ziad Janpiah	Ziad Janpiah
17:00 – 17:15	Detecting anomalous suppliers in electronic procurement systems using GAAN Eduardo Cruz, Natalia Ramirez, Emanuel Parra, and Daniel Ochoa	Eduardo Cruz
17:15 – 17:30	Exploring factors influencing the adoption of in-home respite services: A data science approach Stephen Cheng, Clio Yuen Man Cheng, Dah Ming Chiu, Alice Ming Lin Chong, and Vivian W Q Lou,	Stephen Cheng
17:30 – 17:45	Intentional Youth Development Activities and Peer Effects in a Gang Prevention Program Haoran Jia, Haoyu Li, Xinyue Li, Xiaoxian Shen, Yichen Wang, Zichun Liao, Andrea L. Bertozzi, P. Jeffrey Brantingham, and Jona Lelmi	Jona Lelmi
17:45-18:00	Closing Remarks	

Special Session

9th Special Session on Information Granulation in Data Science and Scalable Computing in conjunction with Big Data Cup Session on Object Recognition with Muon Tomography using Cosmic Rays		
Day 1: Friday, December 15, 2023 (Session Chair: Dominik Ślęzak)		
Time	Title	Presenter/Author
8:00-8:20	[SP09204] Time and Space Complexity of Deterministic and Nondeterministic Decision Trees. Local Approach	Kerven Durdymyradov, Mikhail Moshkov
8:20-8:40	[SP09211] Mining Rare Utility Patterns within Target Items	Yixin Xu, Cuiwei Peng, Jiahui Chen, Wensheng Gan, Shicheng Wan
8:40-9:00	[SP09202] Data Streaming in Concept-Dependent Granulation	Radosław Cybulski, Piotr Artiemjew
9:00-9:20	[SP09215] Using Hospital Information System Data to Estimate Nursing Care Needs	Shusaku Tsumoto, Hiroyuki Ikedo, Tomohiro Kimura, Shoji Hirano

9:20-9:40	[SP09201] Effective Face Inpainting by Conditional Generative Adversarial Network	Tzung-Pei Hong, Jin-Hang Wu, Ja-Hwung Su, Tang-Kai Yin
Day 1: Friday, December 15, 2023 (Session Chair: Dominik Ślęzak)		
Time	Title	Presenter/Author
9:50-10:10	[SC02202] IEEE BigData Cup 2023 Report: Object Recognition with Muon Tomography Using Cosmic Rays	Mateusz Wnuk, Jan Dziuba, Andrzej Janusz, Dominik Ślęzak
10:10-10:30	[SC02203] Iterative Deep Learning for Muon Scattering Tomography	Dymitr Ruta
10:30-10:50	[SC02201] Breaking the U: Asymmetric U-Net for Object Recognition in Muon Tomography	Jannic Cutura, Stefan Pasch
10:50-11:10	[SP09206] Explainability of Leverage Points Exploration for Customer Churn Prediction	Danny Y. C. Wang, Lars Arne Jordanger, Jerry Chun-Wei Lin
11:10-11:30	[SP09213] USER: Towards High-Utility Sequential Rules with Repetitive Items	Hong Lin, Wensheng Gan, Gengsen Huang, Philip S. Yu
11:30-11:50	[SP09203] Accelerating Web-based Graph Visualization with Pixel-Based Edge Bundling	JiETING Wu, Jianxin Sun, Xinyan Xie, Tian Gao, Yu Pan, Hongfeng Yu
Day 1: Friday, December 15, 2023 (Session Chair: Dominik Ślęzak)		
Time	Title	Presenter/Author
12:00-12:20	[SP09209] LM-DiskANN: Low Memory Footprint in Disk-Native Dynamic Graph-Based ANN Indexing	Yu Pan, Jianxin Sun, Hongfeng Yu
12:20-12:40	[SP09207] Context-based Fact-checking Using Knowledge Graph	Hyun Jung Lee, Mye Sohn
12:40-13:00	[SP09212] Targeted Querying of Closed High-Utility Itemsets	Shan Huang, Wensheng Gan, Jinbao Miao
13:00-13:20	[SP09210] When Contrastive Learning Meets Graph Unlearning: Graph Contrastive Unlearning for Link Prediction	Tzu-Hsuan Yang, Cheng-Te Li
13:20-13:40	[SP09205] TreeBERT: Advanced Representation Learning for Relation Extraction	Shashank Hebbar, Ying Xie, Jiang Zhong
13:40-14:00	[SP09214] Analysis of Medical Incident Reports using Text Mining	Shusaku Tsumoto, Tomohiro Kimura, Shoji Hirano

6th Special Session on HealthCare Data		
<i>Workshop Chairs: Sultan Turhan, Ozgun Pinarer</i>		
Day 1: Saturday, December 16, 2023		
Time	Title	Presenter/Author
09:00 – 09:15	Welcome	
09:15 - 09:35	<i>BigD290 A Classification Approach to Detect Social Support in Online Health Communities</i>	Thanaa Ghanem
09:35 – 09:55	<i>BigD287 - Multimodality Data Fusion for COVID-19 Diagnosis</i> <i>SP03206 Is one label all you need? Single positive multi-label training in medical image analysis</i>	Helen Schneider
09:55 – 10:15	<i>SP03222 Toward training NLP models to take into account privacy leakages</i>	Antoine Boutet
10:15 – 10:35	<i>BigD634 More than Just a Diagnosis: A Multi-Task Approach to Analyzing Bipolar Disorder on Reddit via DeMHeM</i>	Shailik Sarkar

10:35 – 10:55	SP03210 Real-Time Heart Rate Monitoring via Wi-Fi Signal	Ozgun Pinarer
10:55 – 11:25	Coffee Break	
11:25 – 11:45	SP03216 Comparison of Machine Learning Classifiers on Integrated Transcriptomic Data	Irene Testa
11:45 – 12:05	SP03227 Precise Temperature Control for Sensitive Medicines	Teoman Naskali
12:05 – 12:25	SP03214 Incorporating Emotions into Health Mention Classification Task on Social Media	Olanrewaju Aduragba
12:25 – 12:45	SP03221 Predicting Mental Health Disorders Post Long COVID Diagnosis Using Advanced Machine Learning Techniques	Manoj Purohit
12:45 – 13:05	SP03226 Classification of Decompression Sickness Signs and Symptoms Using Cluster Analysis	Murat Egi
13:05 – 14:00	Lunch Break	
14:00 – 14:20	SP03201 Learning Cataract Severity Using the Contrast Sensitivity Scale: A Thick Data Approach	Jinan Fiaidhi
14:20 – 14:40	SP03202 Integrating a PICO Clinical Questioning to the QL4POMR Framework for Building Evidence-Based Clinical Case Reports	Sabah Mohammed
14:40 – 15:00	SP03204 Knowledge Graphs, Clinical Trials, Dataspace, and AI: Uniting for Progressive Healthcare Innovation	Mohan Timilsina
15:00 – 15:20	SP03218 Extending Healthy Life Expectancy: Frailty Detection Model Using Smart Meter and Machine Learning	Kijun Kim
15:20 – 15:40	SP03224 Leveraging Graph Databases for Enhanced Healthcare Data Management: A Performance Comparison Study	Sultan Turhan
15:40 – 16:10	Coffee Break	
16:10 – 16:30	SP03215 Visual Analytics and Exploration of Calcium Transient Imaging Data using Event-Based Clustering	Shiaofen Fang
16:30 – 16:50	BigD481 Combat COVID-19 at national level using risk stratification with appropriate intervention	Xuan Jin
16:50 – 17:10	SP03223 On the usage of Benford's Law on coronavirus data statistics	Gunce Keziban Orman
17:10 – 17:30	SP03207 What is Hiding in Medicine's Dark Matter? Learning with Missing Data in Medical Practices	Neslihan Suzen
17:30 – 17:50	SP03225 An Empirical Study of Covid-19 Impact on Health Care Worker's Career Development	Kutay Acar
17:50 – 18:00	Closing Remarks	

Day 2: Sunday, December 17, 2023

Time	Title	Presenter/Author
09:00 – 09:15	Welcome	
09:15 – 09:35	SP03219 Autocompletion of Chief Complaints in the Electronic Health Records using Large Language Models	K M Sajjadul Islam
09:35 – 09:55	SP03209 Deep Learning based Driving Posture Stability Analysis for People with Mobility Challenges	Tingting Chen
09:55 – 10:15	SP03220 Explainable NLP Model for Predicting Patient Admissions at Emergency Department Using Triage Notes	Mahmoud Elbattah
10:15 – 10:35	SP03217 Multi-Task Learning Using Facial Features for Mental Health Screening	Avantika Shrestha
10:35 – 10:55	SP03213 Impact and Analysis of Long COVID on Cardiovascular Diseases	Daniel Chia
10:55-11:10	Closing Remarks	

Special Session 7: Understanding New Markets by Data Science, Social Science, and Economics

Teruaki Hayashi, Hiroki Sakaji, Naoki Watanabe

Time	Title	Presenter/Author
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8:30 - 8:35	Opening Remarks	
8:35 - 8:55	Topic-Based Search: Dataset Search without Metadata and Users' Knowledge about Data	Yukihisa Fujita, Teruaki Hayashi, and Masahiro Kuwahara
8:55 - 9:15	Variable-based Learning Considering Topic Specificity in Heterogeneous Data Clustering Tasks	Kosuke Manabe, Yukihisa Fujita, Masahiro Kuwahara, and Teruaki Hayashi
9:15 - 9:35	Multi-view Graph Convolution for Participant Recommendation	Xiaolong Liu, Liangwei Yang, Chen Wang, Mingdai Yang, Zhiwei Liu, and Philip S. Yu
9:35 - 9:55	Exploring the Fundamental Units of Semantic Representation of Data Using Heterogeneous Variable Network in Data Ecosystems	Teruaki Hayashi, Yukihisa Fujita, and Masahiro Kuwahara
9:55 - 10:15	Resale-proof Trades of Data under Budget Constraints: A Subject Experiment	Kazuhito Ogawa and Naoki Watanabe
10:15 - 10:30	Coffee Break	
10:30 - 11:30	[Invited Talk] Data Spaces, the new paradigm of the new data economy	Dolores Ordoñez
11:30 - 11:50	Indexing and Visualization of Climate Change Narratives Using BERT and Causal Extraction	Hiroki Sakaji and Noriyasu Kaneda
11:50 - 12:10	From Base to Conversational: Japanese Instruction Dataset and Tuning Large Language Models	Masahiro Suzuki, Masanori Hirano, and Hiroki Sakaji
12:10 - 12:30	Harnessing Behavioral Traits to Enhance Financial Stock Recommender Systems: Tackling the User Cold Start Problem	Takehiro Takayanagi and Kiyoshi Izumi
12:30 - 12:35	Closing Remarks	

Special Session on Platform for DFFT (Data Free Flow with Trust)		
<i>WorkshopChairs: Noboru Koshizuka</i>		
Time	Title	Presenter/Author
15:00~15:05	Opening Remarks	
15:05~15:25	SP01201: "ITDT: International Testbed for Dataspace Technology"	Itsuki Matsunaga, Takashi Michikata, and Noboru Koshizuka
15:25~15:45	SP01203: "Toward Open and Sustainable Data Platform for Accessible Pedestrian Network"	Masahiro Bessho, Tomonori Usaka, and Ken Sakamura
15:45~16:00	Break	
16:00~16:20	SP01204: "Hierarchical Rule Compliance Check Method for Federated Query"	IVYA SINGH, Mika Takata, Toshihiko Kashiyama, Satoshi Katsunuma, and Norifumi Nishikawa
16:20~16:40	SP01205: "Applying Homomorphic Encryption to Data Spaces"	Takashi Michikata, Yusuke Sasaki, and Noboru Koshizuka
16:40~16:50	Closing Remarks	

Special Session on Social Cognitive Computing in Digital Education and Learning		
<i>WorkshopChairs: Jerry Chun-Wei Lin</i>		
Time	Title	Presenter/Author
09:45-10:00	A Reflection on Cybersecurity Indigenous Educational Experiences	Kayleigh Tanner, Sarah Plosker, and Gautam Srivastava
10:00-10:15	Unveiling engagement in virtual classrooms: a multimodal analysis	Diletta Chiaro, Daniela Annunziata, Stefano Izzo, and Francesco Piccialli
10:15-10:30	Coffee Break	
10:30-10:45	Robust category recognition based on deep templates for educational mobile applications	Marzena Halama, Katarzyna Filus, and Joanna Domanska
10:45-11:00	HierAct: a Hierarchical Model for Human Activity Recognition in Game-Like Educational Applications	Nur Kelesoglu, Katarzyna Filus, and Joanna Domanska
11:00-11:15	Early ChatGPT User Portrait through the Lens of Data	Yuyang Deng, Ni Zhao, and Xin Huang
11:15-11:30	Large Language Models in Education	Wensheng Gan, Zhenlian Qi, Jiayang Wu, and Jerry Chun-Wei Lin
11:30-11:45	Game Based Virtual Reality Platform for Geometry	Himangshu Sarma, Mahaboob Shaik, Surya Teja Tangirala, and Satyam Kumar Singh

11:45-12:00	A Hybrid Corpus based Fine-grained Semantic Alignment Method for Pre-trained Language Model of Ancient Chinese Poetry	Jie Hong, Tingting He, Jie Mei, Ming Dong, Zheming Zhang, and Xinhui Tu
Closing Remarks		

Special Session on Data-Driven Designation and Implementation of Automated Guided Vehicles		
<i>Workshop Chairs: Jerry Chun-Wei Lin (part 1), Rafal Cupek (part 2)</i>		
Time	Title	Presenter/Author
14:00-14:15	General Concepts in Swarm of Drones Control: Analysis and Implementation	Dariusz Marek, Marcin Paszkuta, Jakub Szyguła, Piotr Biernacki, Adam Domański, Marta Szczygieł, Marcel Król, and Konrad Wojciechowski
14:15-14:30	Unsupervised Learning for Depth Estimation in Unstructured Environments	Pian Qi, Fabio Giampaolo, Edoardo Prezioso, and Francesco Piccialli
14:30-14:45	NetSat: Network Saturation Adversarial Attack	Katarzyna Filus and Joanna Domanska
14:45-15:00	Visual examination of relations between known classes for deep neural network classifiers	Lukasz Sobczak, Katarzyna Filus, Marzena Halama, and Joanna Domanska
15:00-15:15	The Calibration of Single Beam Distance Sensors based on Machine Learning Methods	Piotr Biernacki, Adam Ziebinski, Jia-Hao Syu, and Jerry Chun-Wei Lin
15:15-15:30	Predicting AGV Battery Cell Voltage Using a Neural Network Approach with Preliminary Data Analysis and Processing	Olena Pavliuk, Mykola Medykovskyy, and Tomasz Stęclik
15:30-15:45	Analysis of time management models in AGV wireless communication	Kirill Rukkas and Piotr Gaj
15:45-16:00	Testing Quality of Service of communication system for AGV fleet with Software-Defined Network	Karol Marszałek, Adam Domański, Rafał Cupek, and Marek Drewniak
16:00-16:30	Coffee Break	
16:30-16:45	Convergent wireless real-time communication using EtherCAT and OPC UA for AGV application with big data sets acquisition	Jacek Stój and Piotr Gaj
16:45-17:00	A Fuzzy Optimized Route Selection Framework for Autonomous Vehicles using V-NDN	Anu Kaushik, Rasmeet S Bali, and Gautam Srivastava
17:00-17:15	Reliability Analysis of M2M Cyclic Data Transfer based on ad-hoc Wireless P2P Link	Piotr Gaj, Ireneusz Smółka, and Jacek Stój
17:15-17:30	Estimating the AGV load and a battery lifetime based on the current measurement and random forest application	Krzysztof Hanzel, Damian Grzechca, Adam Ziebinski, Lukas Chruszczyk, and Artur Janus
17:30-17:45	Effective Prediction of Energy Consumption in Automated Guided Vehicles with Recurrent and Convolutional Neural Networks	Paweł Benecki, Daniel Kostrzewa, Piotr Grzesik, Bohdan Shubyn, Jia-Hao Syu, Jerry Chun-Wei Lin, Vaidy Sunderam, and Dariusz Mrozek
17:45-18:00	Lightweight CNN based on Spatial Features for a Vehicular Damage Detection System	Dawid Polap, Antoni Jaszcz, Katarzyna Prokop, and Gautam Srivastava
18:00-18:10	Closing Remarks	

2023 Special Session on Machine Learning on Big Data		
<i>PC Chair: Alfredo Cuzzocrea</i>		
Conference time zone: GMT+1		
16-17 December 2023		
Day 1: Saturday, December 16, 2023		
Time	Title	Presenter/Author
09:00-10:00	Session MLBD1 – Chair: TBA	
09:00-09:20	SP05202 Improved Tactical Decision Making and Control Architecture for Autonomous Truck in SUMO Using Reinforcement Learning	Deepthi Pathare, Leo Laine, and Morteza Haghiri Chehreghani

09:20-09:40	SP05203 Hierarchical Uncertainty Aggregation and Emphasis Loss for Active Learning in Object Detection	Tai Nguyen, Khoa Nguyen, Thanh Nguyen, Tri Nguyen, Anh Nguyen, and Karrman Kim
09:40-10:00	SP05204 Diverse Data Expansion with Semi-Supervised k-Determinantal Point Processes	Simon Johansson, Ola Engkvist, Morteza Chehreghani, and Alexander Schliep
10:00 – 10:30	Coffee Break	
10:30-12:30	Session MLBD2 – Chair: TBA	
10:30-10:50	SP05205 Uncertainty-Aware Optimisation for Sustainable Multimedia Event Processing in Big Data Streams	Felipe Arruda Pontes, Michael Schukat, and Edward Curry
10:50-11:10	SP05207 Spider4SPARQL: A Complex Benchmark for Evaluating Knowledge Graph Question Answering Systems	Catherine Kosten, Philippe Cudră-Mauroux, and Kurt Stockinger
11:10-11:30	SP05208 Using Human Mobility Patterns to Forecast Outliers in a Secondary Stream of Data	Vincent Bolta and Marwan Hassani
11:30-11:50	SP05209 DeepScreen: Boosting Depression Screening Performance with an Auxiliary Task	Ricardo Flores, Avantika Shrestha, and Elke Rundensteiner
11:50-12:10	SP05210 Fine-tuned generative LLM oversampling can improve performance over traditional techniques on multiclass imbalanced text classification	Nicolas Cloutier and Nathalie Japkowicz
12:10-12:30	SP05211 NASerEx: Optimizing Early Exits via AutoML for Scalable Efficient Inference in Big Image Streams	Aakash Kapoor, Rajath Elias Soans, Soham Dixit, Pradeep NS, Brijraj Singh, and Mayukh Das
12:30 – 14:00	Lunch Break	
14:00-16:00	Session MLBD3 – Chair: TBA	
14:00-14:20	SP05212 Stabilizing Adversarial Training for Generative Networks	Walter Gerych, Kevin Hickey, Thomas Hartvigsen, Luke Buquicchio, Abdulaziz Alajaji, Kavin Chandrasekaran, Hamid Mansoor, Emmanuel Agu, and Elke Rundensteiner
14:20-14:40	SP05213 Towards Big Data Analytics over Mobile User Data using Machine Learning	Ichou Sabrina, Hammoudi Slimane, Benna Amel, Alfredo Cuzzocrea, and Meziane Abdelkrim
14:40-15:00	SP05214 Student success analysis for minority students in higher education	Shamiha Binta Manir and Priya Deshpande
15:00-15:20	SP05216 Effective and Efficient Big OLAP Data Cube Compression in Mobile Cloud Environments: The IQTS Algorithm	Alfredo Cuzzocrea and Mojtaba Hajian
15:20-15:40	SP05217 Artificial Intelligence for Spectral Analysis: Challenges and Opportunities	Anqi Chu, Xiang Xie, and Wilhelm Stork
15:40-16:00	SP05218 Distributed Concept Drift Detection for Efficient Model Adaptation with Big Data Streams	Ian Whitehouse, Rodrigo Yopez-Lopez, and Roberto Corizzo
16:00 – 16:30	Coffee Break	
Day 2: Sunday, December 17, 2023		
Time	Title	Presenter/Author
09:00-10:00	Session MLBD4 – Chair: TBA	
09:00-09:20	SP05219 Task Unloading Algorithm for Mobile Edge Computing based on graph neural network	Yuze zhang, Geming Xia, Hongcheng Li, Hongfeng Li, and Hui Song
09:20-09:40	SP05220 UCE-FID: Using Large Unlabeled, Medium Crowdsourced-Labeled, and Small Expert-Labeled Tweets for Foodborne Illness Detection	Ruofan Hu, Dongyu Zhang, Dandan Tao, Huayi Zhang, Hao Feng, and Elke Rundensteiner

09:40-10:00	SP05221 Balancing the Scales: HyperSMOTE for Enhanced Hypergraph Classification	Lulwah AlKulaib and Chang-Tien Lu
10:00 – 10:30	Coffee Break	
10:30-12:30	Session MLBD5 – Chair: TBA	
10:30-10:50	SP05222 UniMHe: Unified Multi Hyperedge Prediction A Case Study on Crime Dataset	Melike Yildiz Aktas, Lulwah AlKulaib, and Chang-Tien Lu
10:50-11:10	SP05225 ENCODE: Ensemble Contextual Bandits in Big Data Settings - A Case Study in E-Commerce Dynamic Pricing	Srividhya Sethuraman, Uma Maheswari G, Siddhesh Thombre, Sunny Kumar, Vikash Patel, and Sharadha Ramanan
11:10-11:30	SP05226 Correlation and Unintended Biases on Univariate and Multivariate Decision Trees	Mattia Setzu and Salvatore Ruggieri
11:30-11:50	SP05227 Speech-based detection of in-car escalating arguments to prevent distracted driving	Francesco Pistolesi, Michele Baldassini, and Beatrice Lazzarini
11:50-12:10	SP05229 F-TBDA: A Frequency-Based Temporal Big Data Analytics Approach for Mining and Analyzing Quality-Of-Life Indicators of Cancer Patients	Alfredo Cuzzocrea, Geertruida H. de Bock, Willemijn J. Maas, and Selim Soufargi
12:10-12:30	SP05232 Scaling Personalized Machine Learning through DTW Clustering: Predicting Glycemia Levels as an Example	Abdelmounaam Rezgui
12:30 – 14:00	Lunch Break	
14:00-16:00	Session MLBD6 – Chair: TBA	
14:00-14:20	SP05234 Machine-Learning-Based Multidimensional Big Data Analytics over Clouds via Multi-Columnar Big OLAP Data Cube Compression	Alfredo Cuzzocrea, Abderraouf Hafsaoui, and Carson Leung
14:20-14:40	BigD259 Multi-Item Continuous Influence Maximization	Jianjun Luo, Ryan Rossi, Xiangnan Kong, and Yanhua Li
14:40-15:00	BigD415 Cross-Silo Federated Learning Across Divergent Domains with Iterative Parameter Alignment	Matt Gorbett, Hossein Shirazi, and Indrakshi Ray
15:00-15:20	BigD528 Online Hierarchical Multi-Label Classification	Wenting Qi and Charalampos Chelmis
15:20-15:40	BigD605 Modular Deep Learning for Big Data: Motivation, Challenges, and Approaches	Samiyuru Menik and Lakshmish Ramaswamy
15:40-16:00	BigD680 Neurosymbolic Knowledge Distillation	Himel Das Gupta and Victor Shengli Sheng
16:00 – 16:30	Coffee Break	
16:30-17:30	Session MLBD7 – Chair: TBA	
16:30-16:50	BigD713 Choosing the Right Time to Learn Evolving Data Streams	Alessio Bernardo, Emanuele Della Valle, and Albert Bifet
16:50-17:10	N241 DataCockpit: A Toolkit for Data Lake Navigation and Monitoring Utilizing Quality and Usage Information	Arpit Narechania, Surya Chakraborty, Shivam Agarwal, Atanu Sinha, Ryan Rossi, Fan Du, Jane Hoffswell, Shunan Guo, Eunyee Koh, Alex Endert, and Shamkant Navathe
17:10-17:30	N247 IDMU: Impact Driven Machine Unlearning	Shubhi Asthana, Bing Zhang, Ruchi Mahindru, Indervir Singh Banipal, and Pawan Chowdhary

2023 Special Session on Privacy and Security Big Data

PC Chair: Alfredo Cuzzocrea
Conference time zone: GMT+1
17-18 December 2023

Day 1: Sunday, December 17, 2023

Time	Title	Presenter/Author
09:00-10:00	Session PSBD1 – Chair: TBA	
09:00-09:20	SP06202 Towards an evolution in the characterization of the risk of re-identification of medical images	Antoine Boutet, Carole Frindel, and Mohamed Maouche
09:20-09:40	SP06203 Enhancing Object Detection in YouTube Thumbnails Forensics with YOLOv4	Shahrzad Sayyafzadeh and Hongmei Chi
09:40-10:00	SP06204 Adversarial and Generative Data-Augmented Resilient Intrusion Detection Systems for Unmanned Aerial Vehicles	Muneeba Asif, Mohammad Ashiqur Rahman, Kemal Akkaya, Hossain Shahriar, and Alfredo Cuzzocrea
10:00 – 10:30	Coffee Break	
10:30-12:30	Session PSBD2 – Chair: TBA	
10:30-10:50	SP06205 Privacy-Preserving Data Integration	Lisa Trigiante, Domenico Beneventano, and Sonia Bergamaschi
10:50-11:10	SP06207 Blockchain-Based Decentralized Verifiable Credentials: Leveraging Smart Contracts for Privacy-Preserving Authentication Mechanisms to Enhance Data Security in Scientific Data Access	Md Jobair Hossain Faruk, Jim Baseny, and Jerry Cheng
11:10-11:30	SP06208 Private Continuous Survival Analysis with Distributed Multi-Site Data	Luca Bonomi, Marilyn Lionts, and Liyue Fan
11:30-11:50	SP06209 Targeted Ads Analysis: What are The most Targeted Personnas?	Hiroaki Kikuchi and Ayaka Aoyama
11:50-12:10	SP06210 BigData Fusion for Trajectory Prediction of Multi-Sensor Surveillance Information Systems	Giuseppe Cascavilla, Alfredo Cuzzocrea, Daniel De Pascale, Mandana Omidbakhsh, and Damian Tamburri
12:10-12:30	SP06212 ANTI-Disinformation: An Adversarial Attack and Defense Network Towards Improved Robustness for Disinformation Detection on Social Media	Kuan-Chun Chen, Justin Chih-Yao Chen, and Cheng-Te Li
12:30 – 14:00	Lunch Break	
14:00-16:00	Session PSBD3 – Chair: TBA	
14:00-14:20	SP06213 Differentially Private Federated Learning: Privacy and Utility Analysis of Output Perturbation and DP-SGD.	Anastasia Pustozero and Rudolf Mayer
14:20-14:40	SP06214 Differentially Private Frequency Tables Based on Random Sampling	Kazuhiro Minami and Takumi Sugiyama
14:40-15:00	SP06215 Guidelines for Federated Aggregation Strategies and Architectures for Next Word Prediction	Yana Sakhnovych and Rudolf Mayer
15:00-15:20	SP06216 Increasing multi-variate privacy for synthetic micro-data with Bayesian Networks	Nina Niederhametner and Rudolf Mayer
15:20-15:40	BigD202 BigBird: Exabyte-scale Big Data Storage and Analytics Framework in Hybrid Cloud	Saurabh Deochake, Gary Steelman, and Vrushali Channapattan
15:40-16:00	BigD214 Securing web apps: An Analysis to understand common vulnerabilities, attack scenarios, and protective measures	Arunakranthi Godishala, B Rajkumar, Ravinder Reddy Malga, Pradeep Kagitapu

16:00 – 16:30	Coffee Break	
Day 2: Monday, December 18, 2023		
Time	Title	Presenter/Author
09:00-10:00	Session PSBD4 – Chair: TBA	
09:00-09:20	BigD219 Quantum Cryptography for Enhanced Network Security: A Comprehensive Survey of Research, Developments, and Future Directions	Mst Akter, Juanjose Rodriguez-Cardenas, Hossain Shahriar, and Alfredo Cuzzocrea
09:20-09:40	BigD233 A Trustable LSTM-Autoencoder Network for Cyberbullying Detection on Social Media Using Synthetic Data	Mst Shapna Akter, Hossain Shahriar, and Alfredo Cuzzocrea
09:40-10:00	BigD237 Multilingual Hate Speech Detection: Comparison of Transfer Learning Methods to Classify German, Italian, and Spanish Posts	Jan Fillies, Michael Hoffmann, and Adrian Paschke
10:00 – 10:30	Coffee Break	
10:30-12:30	Session PSBD5 – Chair: TBA	
10:30-10:50	BigD254 Safe data transmission in IoT system for air pollution monitoring	Janusz Bobulski, Sabina Szymoniak, and Kamila Pasternak
10:50-11:10	BigD265 Random Validation Blockchain Construction and Privacy Protection Method for Federated Learning	Tingwei Chen, Jiacheng Zhang, and Junlu Wang
11:10-11:30	BigD278 Ethical Hacking in Digital Forensics	Damilola Oladimeji, Laura Garland, Jayanthi Ramamoorthy, and Bing Zhou
11:30-11:50	BigD305 Matching Noisy Keys for Obfuscation	Charlie Dickens and Eric Bax
11:50-12:10	BigD343 Analyzing Code Text Strings for Code Evaluation	Tianyu Wang and Zhixiong Chen
12:10-12:30	BigD348 Achieving Privacy and Tracing Unauthorised Data Usage: Anonymisation-based Fingerprinting for Private Data	Tanja Šarčević, Rudolf Mayer, and Philipp Adler
12:30 – 14:00	Lunch Break	
14:00-16:00	Session PSBD6 – Chair: TBA	
14:00-14:20	BigD452 Sorting the Digital Stream: Big Data-driven Insights into Email Classification for Spam and Ham Detection	Syed Attique Shah, Emil Anthony Arputham, Awais Ahmed, and Mohamed Ben Farah
14:20-14:40	BigD551 Privacy-Preserving Data Sharing in Agriculture: Enforcing Policy Rules for Secure and Confidential Data Synthesis	Anantaa Kotal, Lavanya Elluri, Deepti Gupta, Varun Mandalapu, and Anupam Joshi
14:20-14:40	BigD641 Randomized Response Has No Disparate Impact on Model Accuracy	Alycia Carey, Karuna Bhaila, and Xintao Wu
14:40-15:00	BigD763 FedCIO: Efficient Exact Federated Unlearning with Clustering, Isolation, and One-shot Aggregation	Hongyu Qiu, Yongwei Wang, Yonghui Xu, Lizhen Cui, and Zhiqi Shen
15:00-15:20		
16:00 – 16:30	Coffee Break	

9th Special Session on Intelligent Data Mining		
Schedule-16 December 2022 Saturday		
Time	Title	Presenter/Author
07:00 am-08:00 am		Registration

07:50 am-08:00 am		Session Keynote Speech Uraz Yavanoglu, PhD
08:00 am-08:15 am	SP08203	Zahra Moteshaker Arani, Mostafa Haghiri Chehreghani , and Morteza Haghiri Chehreghani <i>Non-Uniform Sampling Methods for Large Itemset Mining</i>
08:15 am-08:30 am	SP08204	Abdüsselam Koç , Özlem Albayrak, Yaşar Kurt, and Perin Ünal <i>A Study to Compare YOLO Family Models for Metal Surface Anomaly Detection</i>
08:30 am-08:45 am	SP08212	Ragini Kihlman and Maria Fasli <i>Multi-label Co-training using a Graph neural network.</i>
08:45 am-09:00 am	SP08218	Mohammad Mahdi Khosravi, Pinar Karagoz , and Ismail Hakki Toroslu <i>IndexAI: AI Based Index Selection for NoSQL Databases</i>
09:00 am-09:15 am	SP08219	Kasim Oztoprak and Reza Hassanpour <i>Efficient Dynamic Federated Learning for Imbalanced Data</i>
09:15 am-09:30 am	SP08205	Peter Samoaa , Linus Aronsson, Philipp Leitner, and Morteza Haghiri Chehreghani <i>Batch Mode Deep Active Learning for Regression on Graph Data</i>
09:30 am-09:45 am	SP08206	Zhaoming Chen , Xinyang Chen, Guoting Chen, and Wensheng Gan <i>Frequent subgraph mining in dynamic databases</i>
09:45 am-10:00 am	SP08207	Zhongtian Sun, Anoushka Harit, Alexandra Cristea , Jingyun Wang, and Pietro Lio <i>A Rewiring Contrastive Patch PerformerMixer Framework for Graph Representation Learning</i>
10:00 am-10:15 am		Break
10:15 am-10:30 am	SP08208	Mogens Graf Plessen <i>A posteriori Trading-inspired Model-free Time Series Segmentation</i>

10:30 am-10:45 am	SP08209	Dmitry Serykh, Stefan Oehmcke, Cosmin Oancea, Dainius Masiliunas, Jan Verbesselt, Yan Cheng, Stéphanie Horion, Fabian Gieseke, and Nikolaj Hinnerskov <i>Seasonal-Trend Time Series Decomposition on Graphics Processing Units</i>
10:45 am-11:00 am	SP08210	Michael Reidy , Henry Mallon, and Jiebo Luo <i>Investigating the Effectiveness of Deep Learning and CFA Interpolation Based Classifiers on Identifying AIGC</i>
11:00 am-11:15 am	SP08211	Olanrewaju Aduragba, Jialin Yu, and Alexandra Cristea <i>Religion and Spirituality on Social Media in the Aftermath of the Global Pandemic</i>
11:15 am-11:30 am	SP08214	Roberto Corizzo and Sebastian Leal-Arenas <i>One-GPT: A One-Class Deep Fusion Model for Machine-Generated Text Detection</i>
11:30 am-11:45 am	SP08215	Enting Zhou, Yurong Liu, Hanjia Lyu , and Jiebo Luo <i>A Fine-Grained Analysis of Public Opinion toward Chinese Technology Companies on Reddit</i>
11:45 am-12:00 pm	SP08216	Jinsheng Pan, Zichen Wang, Weihong Qi , Hanjia Lyu, and Jiebo Luo <i>Understanding Divergent Framing of the Supreme Court Controversies: Social Media vs. News Outlets</i>
12:00 pm-1:00 pm	Lunch Break	
01:00 pm-01:15 pm	SP08217	Jenq-Haur Wang and Yi-Fang Chen <i>Combining Transformers and Tree-based Decoders for Solving Math Word Problems</i>
01:15 pm-01:30 pm	BigD236	Kiana Kheiri, Muhammad Fawad Akbar Khan , Tyler Derr, and Hamid Karimi <i>An In-depth Analysis of the Broken Ties on Twitter</i>
01:30 pm-01:45 pm	BigD272	Brodrick Stigall , Ryan Rossi, Jane Hoffswell, Xiang Chen, Shunan Guo, Fan Du, Eunye Koh, and Kelly Caine <i>On Chatbots for Visual Exploratory Data</i>
01:45 pm-02:00 pm	BigD283	Ngai Lam Ho , Roy Ka-Wei Lee, and Kwan Hui Lim <i>SBTREC - A Transformer Framework for Personalized Tour Recommendation Problem with Sentiment Analysis</i>
02:00 pm-02:15 pm	BigD292	Muhammad Fawad Akbar Khan , John Edwards, Paul Bodily, and Hamid Karimi <i>Deciphering Student Coding Behavior: Interpretable Keystroke Features and Ensemble Strategies for Grade Prediction</i>

02:15 pm-02:30 pm	BigD503	Guohui Ding, Yankai Wang , Yuqi Liu, Chao Jiang, and Lulu Sun <i>DG-GLNet: A Graph Convolutional Network for prediction of time sequence with topological structure</i>
02:30 pm-02:45 pm	BigD521	Jeremy Mechouche , Mohamed Sellami, Zakaria Maamar, Roua Touihri, and Walid Gaaloul <i>Process mining approach for Multi-Cloud SLA Reporting</i>
02:45 pm-03:00 pm	BigD522	Ke Li , Bin Guo, Siyuan Ren, Yasan Ding, and Zhiwen Yu <i>Multi-Source Selective Transfer Learning for Fake News Detection in New Event</i>
03:00 pm-03:15 pm	Break	
03:15 pm-03:30 pm	BigD563	Alvina Hui Shan Lee , Venky Shankararaman, and Eng Lieh Ouh <i>Vision Paper: Advancing of AI Explainability for the Use of ChatGPT in Government Agencies – Proposal of A 4-Step Framework</i>
03:30 pm-03:45 pm	BigD620	Nachiket Deo, Sanguthevar Rajasekaran , and Rany Kamel <i>Identifying suitable attributes for Record Linkage using Association Analysis</i>
03:45 pm-04:00 pm	BigD689	Janet Layne and Edoardo Serra <i>A Novel Method to Enable Transfer Learning of Structural Graph Representations</i>
04:00 pm-04:15 pm	BigD721	Abm Adnan Azmee , Martin Brown, Md Abdullah Al Hafiz Khan, Dominic Thomas, Yong Pei, and Monica Nandan <i>Domain-Enhanced Attention Enabled Deep Network for Behavioral Health Identification from 911 Narratives</i>
04:15 pm-04:30 pm	BigD743	Huang Hanjuan, Peng Hsuan-Ting, and Hsing-Kuo Pao <i>Fake News Detection via Sentiment Neutralization</i>
04:30 pm-04:45 pm	BigD749	Tze-Qian Eng, Hsing-Kuo Pao , and Chi-Chen Liao <i>Self-supervised Federated Learning for Anomaly Detection</i>
04:45 pm-05:00 pm	SP08220	Hande Çavşı Zaim, Esra Nergis Yolaçan , and Uraz Yavanoğlu <i>Intelligent Attack Detection in ROS-based Systems</i>
05:00 pm	END of SESSION	

Big Data Cup Challenges

Posters

Poster ID	Accept Posters
P202	Daniel F.O. Onah and Asia Ibrahim, <i>Evaluating Speech Emotion Recognition through the lens of CNN & LSTM Deep Learning Models</i> Author Email(s): d.onah@ucl.ac.uk, asia.ibrahim.17@ucl.ac.uk Contact Person: Daniel F.O. Onah <d.onah@ucl.ac.uk>
P203	Giovanni Ciaramella, Fabio Martinelli, Francesco Mercaldo, and Antonella Santone, <i>A Proposal for Trustworthy Artificial Intelligence</i> Author Email(s): francesco.mercaldo@iit.cnr.it, giovanni.ciaramella@iit.cnr.it, fabio.martinelli@iit.cnr.it, antonella.santone@unimol.it Contact Person: Francesco Mercaldo <francesco.mercaldo@iit.cnr.it>
P204	Sanjusha Cheemakurthi and Min Chen, <i>Master-ASL: Sign Language Learning and Assessment System</i> Author Email(s): minchen2@uw.edu Contact Person: Min Chen <minchen2@uw.edu>
P205	Tai-Yeon Ku, Wan-Ki Park, and Hoon Choi, <i>Energy BigData platform for residential heat information</i> Author Email(s): kutai@etri.re.kr, wkpark@etri.re.kr, kutai@etri.re.kr Contact Person: Tai-Yeon Ku <kutai@etri.re.kr>
P206	Wan-Ki Park and Tai-Yeon Ku, <i>AI Composite Sensor using BigData for Energy Management System</i> Author Email(s): wkpark@etri.re.kr, kutai@etri.re.kr Contact Person: Wan-Ki Park <wkpark@etri.re.kr>
P207	Manoj M, <i>Big Data and Data Visualization challenges</i> Author Email(s): mm42526w@pace.edu Contact Person: Manoj M <mm42526w@pace.edu>
P208	Manoj M, <i>Comparison of SQL, NoSQL, and NewSQL Database Technologies</i> Author Email(s): mm42526w@pace.edu Contact Person: Manoj M <mm42526w@pace.edu>
P209	Manoj M, <i>IoT-based Big Data Storage Systems Challenges</i> Author Email(s): mm42526w@pace.edu Contact Person: Manoj M <mm42526w@pace.edu>
P210	Jinhyeok Lee and Hyunjung Kim, <i>Utilizing text mining and GIS analysis on the vulnerable disaster type of the elderly living alone</i> Author Email(s): 21900574@handong.ac.kr, ual@handong.edu Contact Person: Jinhyeok Lee <21900574@handong.ac.kr>
P211	Vasuda trehan, <i>How wildfire wreaked havoc in California: Impact of evacuation on residents</i> Author Email(s): Vtrehan@albany.edu Contact Person: Vasuda trehan <Vtrehan@albany.edu>
P212	Ibrahim Almubark, <i>Brain Stroke Prediction Using Machine Learning Techniques</i> Author Email(s): imbark@qu.edu.sa Contact Person: Ibrahim Almubark <imbark@qu.edu.sa>

P213	Sungsoo Kim and Moonyoung Chung, <i>Fast Graph Learning for Traffic Prediction</i> Author Email(s): sungsoo@etri.re.kr, mchung@etri.re.kr Contact Person: Sungsoo Kim <sungsoo@etri.re.kr>
P214	Sunhee Kim, Sang-Ho Chu, Yong-Jin Park, and ChangYong Lee, <i>A computational method of identifying false positives in the variant calling</i> Author Email(s): clee@kongju.ac.kr, king@kongju.ac.kr, shchu@kongju.ac.kr, yjpark301@gmail.com Contact Person: ChangYong Lee <clee@kongju.ac.kr>
P215	Masanori Yamanaka, <i>Data mining of electronic structure of proteins and quantum evolution</i> Author Email(s): yamanaka.masanori@nihon-u.ac.jp Contact Person: Masanori Yamanaka <yamanaka.masanori@nihon-u.ac.jp>
P216	vasuda trehan, <i>AI-Powered Archives: Revolutionizing Information Access for the Future</i> Author Email(s): vtrehan@albany.edu Contact Person: vasuda trehan <vtrehan@albany.edu>
P217	Byron J. Gao, <i>Introducing the Partial Clustering Problem</i> Author Email(s): bgao@txstate.edu Contact Person: Byron J. Gao <bgao@txstate.edu>
P218	Kihyuk Nam, Taewhi Lee, Sung-Soo Kim, and Insik Shin, <i>Learning for Spatio-temporal and Relational Data</i> Author Email(s): nam@etri.re.kr, taewhi@etri.re.kr, sungsoo@etri.re.kr, ishin@kaist.ac.kr Contact Person: Kihyuk Nam <nam@etri.re.kr>
P219	Joel Witzke, Florian Schintke, Ansgar Lößler, and Björn Scheuermann, <i>Proactive Resource Management to Optimize Distributed Workflow Executions</i> Author Email(s): witzke@zib.de, schintke@zib.de, ansgar.loesser@kom.tu-darmstadt.de, scheuermann@kom.tu-darmstadt.de Contact Person: Joel Witzke <witzke@zib.de>
P220	Jiwon Ock, Taewhi Lee, and Seongmin Kim, <i>Privacy-preserving Approximate Query Processing with Differentially Private Generative Models</i> Author Email(s): jwock@etri.re.kr, taewhi@etri.re.kr, sm.kim@sungshin.ac.kr Contact Person: Jiwon Ock <jwock@etri.re.kr>
P221	Giuseppe Di Giacomo, Giulio Franzese, Tania Cerquitelli, Carla Fabiana Chiasserini, and Pietro Michiardi, <i>Multi-View Latent Diffusion</i> Author Email(s): giuseppe.digiaco@polito.it, giulio.franzese@eurecom.fr, tania.cerquitelli@polito.it, carla.chiasserini@polito.it, pietero.michiardi@eurecom.fr Contact Person: Giuseppe Di Giacomo <giuseppe.digiaco@polito.it>
P222	Ryosuke Kobayashi, Nobuo Shigeta, Nobuyuki Saji, and Rie Yamaguchi, <i>Optimization of Public Bus Route in a Smart City Utilizing Real-time Human Location Data Analysis</i> Author Email(s): kobayashi@yamagula.ic.i.u-tokyo.ac.jp, nobuo.shigeta@evaaviation.com, saji@yamagula.ic.i.u-tokyo.ac.jp, yamaguchi.rie@i.u-tokyo.ac.jp Contact Person: Ryosuke Kobayashi <kobayashi@yamagula.ic.i.u-tokyo.ac.jp>
P223	Yi-Lu Jiang, Wen-Chang Chang, and Chih-Yi Chiu, <i>Pineapple Quality Classification in a Multimodal Audio-Visual Dataset</i> Author Email(s): cychiu@mail.ncyu.edu.tw, jiangyl@mail.ncyu.edu.tw, wcchang@mail.ncyu.edu.tw Contact Person: Chih-Yi Chiu <cychiu@mail.ncyu.edu.tw>
P224	Yuki Yada, Tsuneo Matsumoto, Fuyuko Kido, and Hayato Yamana, <i>Why is the User Interface a Dark Pattern? : Explainable Auto-Detection and its Analysis</i> Author Email(s): yada_yuki@yama.info.waseda.ac.jp, fkido@aoni.waseda.jp, yamana@yama.info.waseda.ac.jp Contact Person: Yuki Yada <yada_yuki@yama.info.waseda.ac.jp>
P225	Wing-Lam Mok and SungHo Kim, <i>Mitigating Annotation Artifacts in Physical Commonsense Reasoning Benchmark</i> Author Email(s): wlmokac@korea.ac.kr, sungho3268@korea.ac.kr Contact Person: Wing-Lam Mok <wlmokac@korea.ac.kr>
P227	Ryo Saito, Keita Ushida, and Tatsuya Arakawa, <i>A Study on Watching Support of Werewolf Game Using Log Data Analyzed with Machine Learning</i> Author Email(s): ushida@cc.kogakuin.ac.jp, j019137@kute.tokyo, arakawa@gunma-ct.ac.jp Contact Person: Keita Ushida <ushida@cc.kogakuin.ac.jp>

P228	Evgeny Krivosheev, Katsiaryna Mirylenka, Mattia Atzeni, and Paolo Scotton, <i>Graph Neural Networks for Entity Matching</i> Author Email(s): kmi@zurich.ibm.com, evgeny.krivosheev@jumio.com, mattia.atzeni@epfl.ch, psc@zurich.ibm.com Contact Person: Katsiaryna Mirylenka <kmi@zurich.ibm.com>
P230	Dongho Yang and Sangwhan Cha, <i>An Alternative Illustration to Generalize Sprague-Grundy Theorem</i> Author Email(s): dhyang24@pupils.nlcsjeju.kr, scha@harrisburgu.edu Contact Person: Dongho Yang <dhyang24@pupils.nlcsjeju.kr>
P231	Jyoti Yadav, Aparna Varde, and Lei Xie, <i>Comprehensive cough data analysis on CODA TB</i> Author Email(s): vardea@montclair.edu, yadavj2@montclair.edu, lxi0003@hunter.cuny.edu Contact Person: Aparna Varde <vardea@montclair.edu>
P232	Hyewon Song and Moonyoung Chung, <i>Recurrent Traffic Demand Generation using Urban Traffic Simulation with Cell-based Behavior Model and Real Traffic Data</i> Author Email(s): hwonsong@etri.re.kr, mchung@etri.re.kr Contact Person: Hyewon Song <hwonsong@etri.re.kr>
P233	Shabbab Algamdi and Stephanie Ludi, <i>Enhancing Digital Learning: A Usability Evaluation of the Canvas LMS at the University of North Texas</i> Author Email(s): shabbab.algamdi@unt.edu, Stephanie.ludi@unt.edu Contact Person: Shabbab Algamdi <shabbab.algamdi@unt.edu>
P234	Sae Hyong Park and Namseok Ko, <i>Pangolin: Incast Avoidance in Large Datacenter networks</i> Author Email(s): labry@etri.re.kr, nsko@etri.re.kr Contact Person: Sae Hyong Park <labry@etri.re.kr>
P236	Miyoung Jang, Dong-Myung Seol, Jongho Won, and Ji-Yong Kim, <i>Design and Implementation of Blockchain Data Analysis Platform</i> Author Email(s): myjang@etri.re.kr, dmsul@etri.re.kr, jhwon@etri.re.kr, kjy@etri.re.kr Contact Person: Miyoung Jang <myjang@etri.re.kr>
P237	Ethan Cruz and Thilanka Munasinghe, <i>Exploring Power Outage Prediction Using Weather and Socioeconomic Data in the Southeastern Part of the United States</i> Author Email(s): munast@rpi.edu, cruze6@rpi.edu Contact Person: Thilanka Munasinghe <munast@rpi.edu>
P238	Shahadat Hossain, Raheem Mir, and Emam Hossain, <i>Complex Networks Exploration With Triangles</i> Author Email(s): raheem.mir@uleth.ca, shahadat.hossain@unbc.ca, emam.hossain@uleth.ca Contact Person: Raheem Mir <raheem.mir@uleth.ca>
P239	Dillon Chrimes and Emile Keruzore, <i>Text mining using clinical terms in electronic records of annual falls of patients in home community care</i> Author Email(s): dchrimes@uvic.ca, emilek@uvic.ca Contact Person: Dillon Chrimes <dchrimes@uvic.ca>
P240	Jeongseon Kim, Sungsoo Kim, and Sungsu Lim, <i>Performance Evaluation of Data Imputation Methods for Graph Deep Learning-Based Traffic Prediction</i> Author Email(s): jeongseon@g.cnu.ac.kr, sungsoo@etri.re.kr, sungsu@cnu.ac.kr Contact Person: Jeongseon Kim <jeongseon@g.cnu.ac.kr>
P241	Seunghoon Han, Sungsoo Kim, and Sungsu Lim, <i>Improved Dynamic Coupled Graph Convolutional Recurrent Networks for Traffic Forecasting</i> Author Email(s): tmdgns129@o.cnu.ac.kr, sungsoo@etri.re.kr, sungsu@cnu.ac.kr Contact Person: Seunghoon Han <tmdgns129@o.cnu.ac.kr>
P244	Jang-Ho Choi, Moonyoung Chung, and Jiyong Kim, <i>An Augmentation-agnostic Semantic Preserving Technique for Data Generation</i> Author Email(s): janghochoi@etri.re.kr, mchung@etri.re.kr, kjy@etri.re.kr Contact Person: Jang-Ho Choi <janghochoi@etri.re.kr>
P245	Krisztian Boros and Masafumi Oyamada, <i>Towards Large Language Model Organization: A Case Study on Abstractive Summarization</i> Author Email(s): oyamada@nec.com, ite001458@athuman.com Contact Person: Masafumi Oyamada <oyamada@nec.com>
P246	Suha Kim, Hyuk Lim, and Seunghyun Yoon, <i>Bi-Directional Face Tracking for Precise Facial De-identification in Video Data</i>

	<p>Author Email(s): syoon@kentech.ac.kr, water03@kentech.ac.kr, hlim@kentech.ac.kr Contact Person: Seunghyun Yoon <syoon@kentech.ac.kr></p>
P247	<p>Aakhya Singh, Chirag Bhatia, and Sohom Ghosh, <i>The Effect of Tweets on the Traded Volume of Crypto-Coins</i> Author Email(s): aakhya31@gmail.com, 17chiragbhatia94@gmail.com, sohom1ghosh@gmail.com Contact Person: Aakhya Singh <aakhya31@gmail.com></p>
P248	<p>Pepita Raventos, Josep Ballber, Celio Hernandez, Meritxell Simon Martin, Glòria Jové Monclús, and Roberto García, <i>AI in Archival Holdings and Digital History: Interrelational, Dialogical and Cooperative Interdisciplinary Partnerships</i> Author Email(s): pepita.raventos@udl.cat, josep.ballber@udl.cat, celio.hernandez@udl.cat, meritxell.simon@udl.cat, gloria.jove@udl.cat, roberto.garcia@udl.cat Contact Person: Pepita Raventos <pepita.raventos@udl.cat></p>
P249	<p>Jia Mei Grace Lim and Olakunle Olayinka, <i>Threat Hunting in Internet of Things Networks with Bio-Inspired Models</i> Author Email(s): j.lim@sheffield.ac.uk, o.olayinka@sheffield.ac.uk Contact Person: Jia Mei Grace Lim <j.lim@sheffield.ac.uk></p>
P252	<p>Edward Trudeau, Lin-Ching Chang, Yoshio Nakamura, Mohamad Koubeissi, and Julio Bermudez, <i>Classification of Cognitive-Aesthetic Responses Using Machine Learning and EEG data</i> Author Email(s): trudeaue@cua.edu, changl@cua.edu, yoshi.nakamura@utah.edu, mkoubeissi@mfa.gwu.edu, bermudez@cua.edu Contact Person: Edward Trudeau <trudeaue@cua.edu></p>
P253	<p>Minseo Park, Hyuk Lim, and Seunghyun Yoon, <i>Dividing and Merging for Imbalanced Long-Tail Datasets</i> Author Email(s): syoon@kentech.ac.kr, westpark@kentech.ac.kr, hlim@kentech.ac.kr Contact Person: Seunghyun Yoon <syoon@kentech.ac.kr></p>
P256	<p>Joanne Parkes, Andrew Smith, Steve Benford, Michael Evans, and Lianne Kerlin, <i>Compulsive Bingers or Faithful Fans: Binge-watching behaviour analysis using viewing data and Twitter discourse for 'The Traitors US'</i> Author Email(s): joanne.parkes@nottingham.ac.uk, andrew.p.smith@nottingham.ac.uk, steve.benford@nottingham.ac.uk, michael.evans@bbc.co.uk, lianne.kerlin@bbc.co.uk Contact Person: Joanne Parkes <joanne.parkes@nottingham.ac.uk></p>
P257	<p>Elena Flondor, <i>Exploring AndroidManifest.xml for Automated Android Apps Classification</i> Author Email(s): elena.flondor97@e-uvr.ro Contact Person: Elena Flondor <elena.flondor97@e-uvr.ro></p>
P258	<p>Fahad Hakami and Lin-Ching Chang, <i>Enhancing Arrhythmia Classification through Feature Engineering and Hierarchical Modeling</i> Author Email(s): hakami@cua.edu, changl@cua.edu Contact Person: Fahad Hakami <hakami@cua.edu></p>
P259	<p>Tan Tran, Lin-Ching Chang, and Peter S. Lum, <i>Functional Arm Movement Classification in Stroke Survivors Using Deep Learning with Accelerometry Data</i> Author Email(s): lum@cua.edu, 38tran@cua.edu, changl@cua.edu Contact Person: Peter S. Lum <lum@cua.edu></p>
P260	<p>Dillon Chrimes and Ivan Tang, <i>Big data usability text mining of publicly available YouTube electronic health record (EHR) tutorials</i> Author Email(s): dchrimes@uvic.ca, mynameisots@uvic.ca Contact Person: Dillon Chrimes <dchrimes@uvic.ca></p>
P262	<p>Youngjin Jung, Jisoo Hong, Solip Kim, and Sung Woo Kang, <i>Ammunition Management in the AI Era: Towards CBM+ and Shelf-life Analysis</i> Author Email(s): YoungjinJung@inha.edu, wltnghd5182@inha.edu, solip1@hanwha.com, kangsungwoo@inha.ac.kr Contact Person: Youngjin Jung <YoungjinJung@inha.edu></p>
P263	<p>Jisoo Hong, Youngjin Jung, and Sung Woo Kang, <i>Image Data Augmentation and Detection Study for Pothole Detection Algorithm</i> Author Email(s): wltnghd5182@inha.edu, YoungjinJung@inha.edu, kangsungwoo@inha.ac.kr Contact Person: Jisoo Hong <wltnghd5182@inha.edu></p>
P264	<p>Hyeonmin Park, Jeongho Kim, Eunbi Cho, and Joo Hee Oh, <i>Predicting Patent Transfer in the Manufacturing Industry: A Machine Learning Model for Patent Analytics Using BERT</i></p>

	<p>Author Email(s): jooheeoh@handong.edu, gusalsgmlidud@handong.ac.kr, jeonghokim123@gmail.com, 22000724@handong.ac.kr Contact Person: Joo Hee Oh <jooheeoh@handong.edu></p>
P265	<p>Kamuna Kipa, Nigel Kari Totona, Eunbi Cho, Jeongho Kim, Seon Tae Kim, and Joo Hee Oh, <i>A Data-Driven Approach to Predict Social Impact of Rural Tourism: Insights from UNWTO's Video Campaigns</i> Author Email(s): jooheeoh@handong.edu, Kipa.kamu@gmail.com, njrtotona@gmail.com, 22000724@handong.ac.kr, jeonghokim123@gmail.com, skim78@handong.edu Contact Person: Joo Hee Oh <jooheeoh@handong.edu></p>
P266	<p>Dillon Chrimes and Chanhee Kim, <i>Comparison of MIMIC-III and MIMIC-IV for big data analytics of health informatics</i> Author Email(s): dchrimes@uvic.ca, chanheek@uvic.ca Contact Person: Dillon Chrimes <dchrimes@uvic.ca></p>
P267	<p>Angel Kodituwakku, Clark Xu, Daniel Rogers, Dave Ahn, and Errin Fulp, <i>Temporal Aspects of Cyber Threat Intelligence</i> Author Email(s): efulp@centripetalnetworks.com, akodituwakku@centripetalnetworks.com, cxu@centripetalnetworks.com, danielrogers@centripetalnetworks.com, dahn@centripetalnetworks.com Contact Person: Errin Fulp <efulp@centripetalnetworks.com></p>
P268	<p>Haeun Jang, Sanghee Kim, Jongseok Jeon, and JooHee Oh, <i>Voice of Employee: Impact of Online Reviews on Company and Job Seeker Matching Performance</i> Author Email(s): jooheeoh@handong.edu, ha_eun.jang@kaist.ac.kr, heexi07@handong.ac.kr, jsjeon@postech.ac.kr Contact Person: JooHee Oh <jooheeoh@handong.edu></p>
P269	<p>Gawon Lim, <i>Feature Importances for Predicting Future Performance of Professional Soccer Player</i> Author Email(s): gawonl2@illinois.edu Contact Person: Gawon Lim <gawonl2@illinois.edu></p>
P270	<p>Xintong Zhao, Kyle Langlois, Jacob Furst, Scott McClellan, Rob Fleur, Yuan An, Xiaohua Hu, Fernando Uribe-Romo, Diego Gualdron, and Jane Greenberg, <i>When LLM Meets Material Science: An investigation on MOF Synthesis Labeling</i> Author Email(s): xz485@drexel.edu Contact Person: Xintong Zhao <xz485@drexel.edu></p>
P271	<p>Rob Fleur, Addy Ireland, Xintong Zhao, Scott McClellan, Eric Paltoo, Tianyu Su, Channyung Lee, Yuan An, Xiaohua Hu, Elif Ertekin, and Jane Greenberg, <i>Investigating Data Reusability in Density Functional Theory Studies</i> Author Email(s): xz485@drexel.edu, er934522@ucf.edu, ya45@drexel.edu, jg3243@drexel.edu Contact Person: Xintong Zhao <xz485@drexel.edu></p>
P273	<p>Seonu Kim, Yoel Shin, SeongWoo Park, Semakula Joel, Seon Tae Kim, and JooHee Oh, <i>Detecting Greenwashing in Sustainability Disclosures: A Prediction Model for KOSPI 200 Enterprises using ESG-BERT</i> Author Email(s): jooheeoh@handong.edu, 21800090@handong.ac.kr, joel@handong.ac.kr, jimmy0302z@gmail.com, joelsemakula64@gmail.com, skim78@handong.edu Contact Person: JooHee Oh <jooheeoh@handong.edu></p>
P274	<p>Georg Stefan Schlake and Christian Beecks, <i>Towards Automated Clustering</i> Author Email(s): georg.schlake@fernuni-hagen.de, christian.beecks@fernuni-hagen.de Contact Person: Georg Stefan Schlake <georg.schlake@fernuni-hagen.de></p>
P275	<p>Giwon Sur, Hyejin Kim, Seunghyun Yoon, and Hyuk Lim, <i>Development of AI-based Intrusion Detection System with Real-Time Flow Feature Extraction</i> Author Email(s): hlim@kentech.ac.kr, gwsur@kentech.ac.kr, hyejinkim@gist.ac.kr, syoon@kentech.ac.kr Contact Person: Hyuk Lim <hlim@kentech.ac.kr></p>
P276	<p>Sukbeom Chang, Youeel Sadek Kamal Abdelnour, Ivis Maria Companioni Cardoso, Jeongho Kim, Joo Hee Oh, and Seon Tae Kim, <i>Assessing Regional Disparities in Human Development and Multidimensional Poverty: A Satellite Imagery and Machine Learning Approach</i> Author Email(s): jooheeoh@handong.edu, busut487900@gmail.com, youeelkaradsheh@outlook.com, iviscompanioni@gmail.com, jeonghokim123@gmail.com, skim78@handong.edu Contact Person: Joo Hee Oh <jooheeoh@handong.edu></p>
P277	<p>Geuna Jo, Hyuk Lim, and Seunghyun Yoon, <i>Combining Wavelet and MFCC Features for Emotion Recognition in Conversation</i></p>

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Floor Layout

Wi-Fi Network

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Password: BigData2023

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Mid December 2024 at
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