

Thirteenth International Conference on Digital Information Management (ICDIM 2018)

Venue: **Mercure Berlin MOA Hotel**
September 24- 26, 2018

Preliminary Program

September 24, 2018 - Day I
08:30 – 09:30 - Registration
09:30-09:40: Opening Ceremony
09:40-10:30- Keynote 1-Alton CHUA on The Research Landscape of User-generated Digital Information: Challenges and Possibilities (Singapore)
10:30 - 10:50 -Coffee Break

Session I –Machine Learning and Natural Language Processing

10:50-11:10: Text classification based on LSTM and attention-*Xuemei Bai (China)*

11:10-11:30: A Summary Of Using Reinforcement Learning Strategies For Treating Project And Production Management Problems
Athanasios Kiatipis (Germany), Georgios Koulinas Alexandros Xanthopoulos, Athanasios Kiatipis Germany, Dimitrios Koulouriotis (Greece)

11:30-11:50: Ontology of Academic Sentence Dependencies for a Verb Choice Suggestion- *Sarunya Kanjanawattana (Thailand)*
Sarunya Kanjanawattana (Thailand), Masaomi Kimura (Japan)

11:50-12:10: K2 platform in Business process management- *Ivana Ogrizek Biskupic Robert Arapovic Bosnia, Herzegovina Mateo Jurcic*
Bosnia and Herzegovina (Croatia)

12:10-12:30: Exploiting Function Words Feature in Classifying Deceptive and Truthful Reviews- *Al Hafiz Akbar Maulana Siagian*
Masayoshi Aritsugi (Japan)

12:30-12:50: Sensitivity of Estimators for Measuring Information Amount in Web-Based Medical Documents-
Jolanta Pietraszko (Poland)

12:30 - 14:00 - Lunch

Session I Contd...

14:00-14:20: Deep Learning in Classifying Sleep Stages- *Mohamed H. Al Meer MD, Abdullah Al Mamun (Qatar)*

14:20-14:40: Learning Patent Speak: Investigating Domain-Specific Word Embeddings- *Julian Risch, Ralf Krestel (Germany)*

14:40-15:00: Smart parking system - another way of sharing economy provided by private institutions- *Adrian Florea, Simona-Daniela Marcu (Romania)*

Session II - Data Mining

15:00-15:20: SimFiller: Similarity-Based Missing Values Filling Algorithm- *Fateh ur Rehman (Pakistan), Muhammad Abbas, Sajjad Murtaza (Germany), Wasi Haider Butt Usman Qamar, Saad Rehman(Pakistan)*

15:20-15:40: Attention Based Neural Architecture for Rumor Detection with Author Context Awareness- *Sansiri Tarnpradab, Kien Hua (United States)*

15:40-16:00: On the Analysis of a Public Dataset for Diabetes- *M. Omair Shafiq, Abdihakim Mao, (Canada)*

15:20-16:40: *Compliance at Velocity within a DevOps Environment-* *Muhammad Zaid Abrahams, Josef Langerman (South Africa)*

16:40-17:00: Development of Autonomous Intelligent System for Google Ads- *Burcu Kuleli Pak, Bora Mocan, Sema Yıldız Yoldaş, Neşe Baz(Turkey)*

17:00-17:20: Use of virtual private networks (VPN) and proxy servers: Impact of personality and demographics- *Antonin Pavlicek (Czech Republic), Frantisek Sudzina (Denmark)*

17:20-17:40: Botnet Detection in Network System Through Hybrid Low Variance Filter, Correlation Filter and Supervised Mining Process- *Ferry Astika Saputra, Muhammad Fajar Masputra, Iwan Syarif, Kalamullah Ramli (Indonesia)*

17:40-18:00: Multi-Clustering Applied to Collaborative Recommender Systems -*Urszula Kuźelewska, Arkadiusz Kuryłowicz (Poland)*

18:00-18:20 - *The importance of interaction mechanisms in blended learning courses involving problem solving e-tivities-* *Antonello Venditti, Fausto Fasano, Michele Risi, Genoveffa Tortora (Italy)*

18:20-18:40 - *Conceptualization of a knowledge management framework for governments: A case of devolved county governments in Kenya-* *Patrick Kanyi Wamuyu, Joshua Rumo Ndiege (Kenya)*

18:40-19:00 Mining Trajectory Data and Identifying Patterns for Taxi Movement Trips-*Omair Shafiq, Rami Ibrahim (Canada)*

19:00-19:20 - Interacting With Motivational Virtual Agent: The Effects of Message Framing and Regulatory Fit on Cognitive Load and Intrinsic Motivation- *Tze Wei Liew, Su-Mae Tan, Chin Lay Gan (Malaysia)*

19:20-19:30 - Grammatical Error Checking Systems: A Review of Approaches and Emerging Directions- *Nora Madi, Hend S. Al-Khalifa (Saudi Arabia)*

16:20 - 16:40 -Coffee Break

September 25, 2018 - Day II

Session III- 09:00-09:45-Tutorial -Paul NIEUWENHUYSEN **on Information discovery based on the emerging technology to analyse digital images (Belgium)**

09:45 – 10:00 -Coffee Break

Session IV - Sixth International Workshop on Data Science (IWDS 2018)

10:00-10:20: Treating Missing Data in Industrial Data Analytics- Lisa Ehrlinger Thomas Grubinger, Bence Varga, Mario Pichler and Jürgen Zeindl (Austria)

10:20-10:40: Machine Learning-based Code Analysis for Software Quality Assurance- Eldar Sultanow, Gergana Vladova, Stefan Konopik and André Ullrich (Germany)

10:40-11:00: SVM-RBM based Predictive Maintenance Scheme for IoT-enabled Smart Factory- Soonsung Hwang Youngbin Kang, Jongpil Jeong (Korea)

11:00-11:20: Machine Learning for Predicting the Damaged Parts of a Low Speed Vehicle Crash- Milan Koch, Hao Wang and Thomas Bäck (Germany)

11:20-11:40: Customer Churn Prediction for a Motor Insurance Company- Maria Spiteri, George Azzopardi (Netherlands),

11:40-12:00: Sensitivity Based Anonymization with Mixed Generalization- Esther Gachanga, Micheal Kimwele and Lawrence Nderu (Kenya)

12:00-12:20: Lung cancer medical image recognition using Deep Neural Networks- Goran Jakimovski (Macedonia)

12:20-12:40- A Literature Analysis for the Identification of Machine Learning- and Feature Extraction Methods for Sentiment Analysis- Bernd MARKSCHEFFEL, Markus Haberzettl (Germany)

12:20 - 14:00 - Lunch

Session V – Human-Computer Interaction

14:00-14:20: Ontology Coverage Tool and Document Browser for Learning Material Exploration- *Christian Grévisse (Luxembourg)*
Christian Jeff Meder, Jean Botev, Steffen Rothkugel (Luxembourg)

14. 20-14:40: The Effect of Different Type of Information on Trust in Facebook Page -*Hasrini Sari, Farhan Mutaqin, Aditya Parama Setiaboedhi, (Indonesia)*

14:40-15:00: A Model-Based Approach to Guide Digital Transformation- *Hilda Tellioglu (Austria)*

15. 00-15:20: Lead Lag Relationship between Investor Sentiment in Social Media, Investor Attention in Google, and Stock Return-
Hasrini Sari, Aldila Rizkiana, Pameodji Hardjomidjojo, Budhi Prihartono, Indryati Sunaryo, Ilham Prasetyo (Indonesia)

15:20-15:40: The Development and Analysis of TWISH: A Lightweight-Block-Cipher-TWINE-Based Hash Function -*Deden Irfan, Afryansyah Magfirawaty, Kalamullah Ramli (Indonesia)*

15:40-16:00 -Coffee Break

Session VI–Data Management and Big Data

- 15. 40-16:00:** PediatricDB: Data Analytics Platform for Pediatric Healthcare - *Shantanu Deshmukh, Natalia Khuri (United States)*
- 16. 00-16:20:** A Flexible Approach to Documenting and Presenting Multimedia Performances Using Motion Capture Data- *Roman Berka, Bohuš Získal, Zdeněk Trávníček (Czech Republic)*
- 16:20-16:40:** Creating Digital Collages Inspired by English Texts- *Vandana Kannan, Natalia Khuri (United States)*
- 16:40-17:00:** Towards Sustainable Digital Twins for Vertical Farming- *José Monteiro, João Barata, Marco Veloso, Luis Veloso, João Nunes (Portugal)*
- 17:20-17:40:** A Data-Driven Approach to Vessel Trajectory Prediction for Safe Autonomous Ship Operations- *Brian Murray, Lokukaluge Prasad Perera (Norway)*
- 17:40-18:00:** Image Dataset for Visualizing Eye-Tracking Patterns in Autism Spectrum Disorder- *Mahmoud Elbattah, Romuald Carette, Mahmoud Elbattah, Gilles Dequen, Jean-Luc Guérin, Federica Cilia (France)*
- 18:00-18:20** - High Performance RDF Updates with TripleBit - *Hai Jin, Pingpeng Yuan, Lijian Fan, Hai Jin (China)*
- 18:20-18:40** - True Satisfaction in e-Marketing Product with focus on User Satisfaction Implementation Semantic Mechanism Methodology- *Hani Abdelsalam(Egypt)*
- 18:40-19:00-** Analyzing the Perception of Online Sheet Music Search: A Case Study *Dinuka De Silva, Saman Hettiarachchi (Sri Lanka)*
- 19:00-19:20** - Unsupervised Topic Detection based on 2D Vector Space model using Apriori Algorithm and NLP -*Michael George (United Arab Emirates)*
- 19:20-19:40-** Urdu Text Classification: A comparative study using machine learning techniques-*Imran Rasheed (India)*

September 24, 2018 - Day I Workshop

12:00-12:20 - *Minoru Motoki, Hirohito Shintani, Kazunori Matsuo, Thomas Martin McGinnity* Function Approximation Using Multilayer SAM Spiking Neural Network

12:20-12:40 -*Oba Zubair Mustapha*
Adoption of Bandwidth Management Technique using Dynamic LSP Tunnelling and LDP in MPLS for sustainable Mobile Wireless Networks

12:40-14:00 **LUNCH**

14:00-14:20 -*Tengyue Li, Simon Fong, Luís Moutinho*
Future Generation of Unmanned Retails and Algorithm-Self

14:20-14:40 -*Xiaohui Zhu, Yong Yue, Rui Liu, Ming Liu, Jaiwei Mao and Yixin Zhang* Designing an Unmanned Surface Vehicle for Water quality monitoring

14:40-15:00 -*Sunitha Cheriyan, Shaniba Ibrahim, Teresa George*
Empirical analysis on the efficiency of clustering algorithms based on the significance of cluster size

15:20-15:40 **SCCCS Workshop**

Hesham Hasan, Ghassan Ali, Wael Elmedany Chitra Balakrishna
A security and performance review of IoT encryption algorithms

15:40-16:00 -*Sameer Aljeshi, Tarfa Ahmed, Al-Aswad Hasan Elmedany Wael, Chitra Balakrishna*
Distributed Ledger Transformations for Fintech Industry, Challenges, and Opportunities

16:00-16:20 **COFFEE BREAK**

16:20-16:40 -*Hasan Al-Aswad, Wael Elmedany, Chitra Balakrishna*
Blockchain as an enabler for the Social Health Insurance Program in the kingdom of Bahrain

16:40-17:00 -*Kingsford Kissi Mireku, Feng Li Zhang, Komlan Gbongli, Daniel Kotei, Mary Margaret*
Protecting the Confidentiality and the Privacy Preservation of the Ghana National Health Insurance Scheme Members

17:00-17:20 -*Olusola Akinrolabu, Steve New, Andrew Martin*
Cloud Service Supplier Assessment: A Delphi Study

17:20-17:40 -*Saloni Gandhi, Anuja Gore, Sakshi Nimbarte, Jibi Abraham*
Implementation and Analysis of a Serverless Shared Drive with AWS Lambda

September 25, 2018 - Day II Workshop

09:40-10:00 -*Charles Mutigwe, Johnson Kinyua*

A Blockchain-Enabled RFID Protocol for Supply Chain Management

10:00-10:20 **Coffee Break**

10:20-10:40 -*Aboubakr Aqle, Kamran Khowaja, Dena Al-Thani*

Accessibility or Usability of "Interact SE"?: A Heuristic Based Approach to Evaluate Proposed Search Engine for the Visually Impaired Users

10:40-11:00 -*Yapeng Wang, Xu Yang, Rong Li*

A Low-cost Arduino and Cloud Based In-class Quiz System

11: 00-11: 20 -*Khwlah Alrajhi, Mohammed EL Affendi*

Automatic Arabic Part-of-Speech Tagging: A Deep Learning LSTM Neural Network Approach

11:20-11:40 -*Ali Elmahmudi, Hassan Ugail, Ali Bukar*

Average Weights of Eigenvalue Decomposition for Efficient Face Image Processing

11:40-12:00 -*Sabah Al-Fedaghi, Manal Alsharah*

Security Processes as Machines: A Case Study

12:00-12:20 *Taha Rassem*

Texture and Medical Image Classification Using Wavelet Completed Local Ternary Count (WCLTC)
Texture Descriptor

12:20-12:40 -*Amal Al-Abri*

PerLCol: A Framework for Personalized e-Learning with Collaboration Support

12:40-14:00 **LUNCH**

14:00-14:20 -*Olugbenga Oluwagbemi*

On the Bio-inspired Computational framework for exploring the production and management of sustainable energy

14:20-14:40 -*Hung-Yuan Chung, Yao-Liang Chung, and Chih-Yen Liang*

An image recognition-based system for correcting body posture

14:40-15:00 -*Abdelali El Bouchti*

Financial Risk Management using Maximum Entropy

15:20-15:40 -*Auday Mohamad, Noor Jumaa, Samer Majeed*

Thing speak Cloud Computing Platform Based ECG Diagnose System

15:40-16:00 -*Raad Hadi, Loay George*

An Automated Ear Detection Method based on Sobel Edge Detection and Image Subtraction Techniques

16:00-16:20 **COFEE BREAK**

16:20-16:40 -*bdelali El Bouchti*

Enhancing Portfolio Risk Analysis based on Stochastic Game Nets Approach

16:40-17:00 -*Saifuldeen A. Mohammed, Taghreed Mohamed Ali, Ammar Sabah, Abdullah Abd Ali Jassim*

Dynamic Password Generation Using Random Pseudo Noise Compact With Random Mapping Transform Algorithm

17:00-17:20 -*Yu-Liang Liu*

Wavelength assignment for conducting exchanged folded hypercube communication pattern on optical bus

17:20-17:40 -*Ezendu Ariwa, Koodichimma Chinazom Ariwa*

Digital Housing and Homeless Accommodation Provisions in the UK (Implications for Families Vulnerability and Healthcare Finance)

19:20-21.00- Conference Banquet

September 26, 2018 - Day III

Tour-