

| TIME (London)<br>BST / UTC +1 | Thu<br>July 14                                                                                                                                          | Fri<br>July 15                                                                                                                                                                    |
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| 01:00 PM - 01:30 PM           | Opening Ceremony                                                                                                                                        | Session 11 - Data Science<br>Session 12 - Natural Language Processing<br>Session 13 - Quantum Computing<br>Session 14 - Smart Healthcare<br>Session 15 - Machine Vision           |
| 01:30 PM - 02:00 PM           | Networking                                                                                                                                              |                                                                                                                                                                                   |
| 02:00 PM - 03:00 PM           | Keynote - Dave Lacey, Graphcore                                                                                                                         | Keynote - Lin William Cong, Cornell SC Johnson College of Business                                                                                                                |
| 03:00 PM - 03:30 PM           | Virtual Roundtable - Health Problems Related to Information Technology Use: Is More Technology the Answer?                                              | Virtual Roundtable - Focus on cyber security and the importance of that given the current climate                                                                                 |
| 03:30 PM - 04:30 PM           | Keynote - Craig Knoblock, USC                                                                                                                           | Keynote - Zahari Zlatev, Aarhus University                                                                                                                                        |
| 04:30 PM - 06:00 PM           | Session 1 - Data Science<br>Session 2 - Computing<br>Session 3 - Robotics<br>Session 4 - Deep Learning<br>Session 5 - Security                          | Session 16 - Data Science<br>Session 17 - Natural Language Processing<br>Session 18 - e-Learning<br>Session 19 - Deep Learning<br>Session 20 - Security                           |
| 06:00 PM - 07:30 PM           | Session 6 - Data Science<br>Session 7 - Computing<br>Session 8 - Artificial Intelligence<br>Session 9 - Ambient Intelligence<br>Session 10 - Blockchain | Session 21 - Data Science<br>Session 22 - Natural Language Processing<br>Session 23 - Artificial Intelligence<br>Session 24 - Human Computer Interaction<br>Session 25 - Security |
| 07:30 PM - 08:00 PM           | Virtual Roundtable - AI for Healthcare Data Analysis                                                                                                    | Virtual Roundtable - AI in Cybersecurity                                                                                                                                          |
| 08:00 PM - 08:30 PM           | Day Closing                                                                                                                                             | Closing Ceremony                                                                                                                                                                  |

| Session 1 - Data Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Session 2 - Computing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Session 3 - Robotics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Session 4 - Deep Learning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Session 5 - Security                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <p>83 - What Augmentations are Sensitive to Hyper-Parameters and Why? (Presenter: <b>Ch Muhammad Awais</b>)</p> <p>57 - Text to Image Synthesis using Stacked Conditional Variational Autoencoders and Conditional Generative Adversarial Networks (Presenter: <b>Haileleol Tibebu</b>)</p> <p>404 - Detection of Credit Card Frauds with Machine Learning Solutions: An Experimental Approach (Presenter: <b>Nikolaos Christou</b>)</p> <p>18 - Near Infrared Spectra Data Analysis by using Machine Learning Algorithms (Presenter: <b>Perry Xiao</b>)</p> <p>88 - Retrospective Analysis of Global Carbon Dioxide Emissions and Energy Consumption (Presenter: <b>Rajvir</b>)</p> <p>403 - Data Mining Solutions for Fraud Detection in Credit Card Payments (Presenter: <b>Stanislav Selitskiy</b>)</p> <p>271 - A Descriptive Literature Review and Classification of Business Intelligence and Big Data Research (Presenter: <b>Ammar Rashid</b>)</p> <p>286 - Machine Learning of a Pair of Charged Electrically Particles Inside a Closed Volume (Presenter: <b>Huber Nieto-Chaupis</b>)</p> | <p>262 - A Hybrid Real-Time Scheduling Mechanism based on Multiprocessor for Real-Time Tasks in Weakly Hard Specification (Presenter: <b>Habibah Ismail</b>)</p> <p>89 - Development of a Language Extension for Configuration of Industrial Asset Capabilities in Self-organized Production Systems (Presenter: <b>Felix Brandt</b>)</p> <p>326 - Webometric Network Analysis of Cybersecurity Cooperation (Presenter: <b>Emmanouil Koulas</b>)</p> <p>52 - Reducing Web-Latency in Cloud Operating Systems to Simplify User Transitions to the Cloud (Presenter: <b>Luke Gassmann</b>)</p> <p>217 - Significance in Marlo Diagrams versus Thoroughness of Venn Diagrams (Presenter: <b>Marcos Bautista López Aznar</b>)</p> <p>143 - Safety Instrumented System Design Philosophy Paradigm Shift to Achieve Safe Operations of Interconnected Operating Sites (Presenter: <b>Soloman Moses Almadi</b>)</p> <p>46 - Open-Source Mapping Method Applied to Thermal Imagery (Presenter: <b>J. P. Matos-Carvalho</b>)</p> <p>40 - Curious Properties of Latency Distributions (Presenter: <b>Michal Gajda</b>)</p> | <p>49 - The Pareto-Frontier-based Stiffness of a Controller (Presenter: <b>Zhe Shen, Takeshi Tsuchiy</b>)</p> <p>32 - A Raspberry Pi Computer Vision System for Self-Driving Cars (Presenter: <b>Emanuele Lindo Secco</b>)</p> <p>137 - The Applying of Low Order Frequency-Dependent Components in Signal Processing of Autonomous Mobile Robotic Platforms (Presenter: <b>Ivan Afanasyev</b>)</p> <p>362 - Ultra-Low-Power Range Error Mitigation for Ultra-Wideband Precise Localization (Presenter: <b>Simone Angarano</b>)</p> <p>191 - Run-Time Dependency Graph Models for Independently Developed Robotic Software Components (Presenter: <b>Christian Schlegel</b>)</p> <p>298 - Dynamic Analysis and Modeling of DNN-based Visual Servoing Systems (Presenter: <b>Daniel Ortiz-Arroyo</b>)</p> <p>33 - Implementation of a Balanced and Fluid Movement Six-legged Spider Robot (Presenter: <b>Mustafa Ayad</b>)</p> <p>233 - Remote Manipulation of a Robotic Arm with 6 DOF via IBSV using a Raspberry Pi and Machine Vision (Presenter: <b>Sandro Francisco Balarezo Gallardo</b>)</p> | <p>128 - Laplacian Pyramid-like Autoencoder (Presenter: <b>Sangjun Han, Taeil Hur</b>)</p> <p>58 - Anomaly Detection using Deep Learning and Big Data Analytics for the Insider Threat Platform (Presenter: <b>Abu Alam</b>)</p> <p>347 - A Stochastic Modified Limited Memory BFGS for Training Deep Neural Networks (Presenter: <b>Mahsa Yousefi</b>)</p> <p>320 - Enhanced Deep Learning Framework for Fine-Grained Segmentation of Fashion and Apparel (Presenter: <b>Ari Happonen</b>)</p> <p>228 - Deep Convolutional Neural Networks for COVID-19 Detection from Chest X-Ray Images using ResNetV2 (Presenter: <b>Javad Zarrin</b>)</p> <p>183 - The Current State of the Art in Deep Learning for Image Classification: A Review (Presenter: <b>Adam Byerly, Tatiana Kalganova</b>)</p> <p>306 - Application of Machine Learning in Predicting the Impact of Air Pollution on Bacterial Flora (Presenter: <b>Andreja Naumoski</b>)</p> <p>428 - Deep Neural Networks for Remote Sensing Image Classification (Presenter: <b>Giorgia Miniello</b>)</p> | <p>348 - A Security System for National Network (Presenter: <b>Hyeon Jo</b>)</p> <p>315 - An Advanced Algorithm for Email Classification by using SMTP Code (Presenter: <b>Hyeon Jo</b>)</p> <p>56 - Data Security Awareness and Proper Handling of ICT Equipment of Employees: An Assessment (Presenter: <b>Dorothy M. Ayuyang</b>)</p> <p>250 - Hybrid-AI Blockchain Supported Protection Framework for Smart Grids (Presenter: <b>Sai Ganesh S</b>)</p> <p>178 - Measuring the Resolution Resiliency of Second-Level Domain Name (Presenter: <b>Lanlan Pan</b>)</p> <p>232 - Key Exchange Protocol based on the Matrix Power Function Defined over IM16 (Presenter: <b>Aleksejus Mihalkovich</b>)</p> <p>248 - Reducing Exposure to Hateful Speech Online (Presenter: <b>Jacques Ophoff</b>)</p> <p>207 - Questions of Trust in Norms of Zero Trust (Presenter: <b>Allison Wyld</b>)</p> |

| Session 6 - Data Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Session 7 - Computing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Session 8 - Artificial Intelligence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Session 9 - Ambient Intelligence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Session 10 - Blockchain                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| <p>416 - ALBU: An Approximate Loopy Belief Message Passing Algorithm for LDA for Small Data Sets (Presenter: Rebecca Taylor)</p> <p>290 - Metrics for Software Process Quality Assessment in the Late Phases of SDLC (Presenter: Artem Kruglov)</p> <p>70 - Application of Weighted Co-Expressive Analysis to Productivity and Coping (Presenter: Yana Ivanovna Sipovskaya)</p> <p>134 - Timeline Branching Method for Social Systems Monitoring and Simulation (Presenter: Anton Ivaschenko)</p> <p>328 - Finding Structurally Similar Objects based on Data Sorting Methods (Presenter: Alexey Myachin)</p> <p>376 - Neural Networks with Superexpressive Activations and Integer Weights (Presenter: Aleksandr Beknazaryan)</p> <p>23 - On Regret Bounds for Continual Single-Index Learning (Presenter: The Tien Mai)</p> | <p>309 - Strided DMA for Multidimensional Array Copy and Transpose (Presenter: Rishi Khan)</p> <p>367 - Generalizing Univariate Predictive Mean Matching to Impute Multiple Variables Simultaneously (Presenter: Mingyang Cai)</p> <p>332 - Crescoware: A Container-based Gateway for HPC and AI Applications in the ENEAGRID Infrastructure (Presenter: Angelo Mariano)</p> <p>261 - Bifurcation Revisited Towards Interdisciplinary Applicability (Presenter: Bernhard Heiden)</p> <p>212 - Estimation of Velocity Field in Narrow Open Channels by a Hybrid Metaheuristic ANFIS Network (Presenter: Hossein Bonakdari)</p> <p>78 - Scalable Computing through Reusability (Presenter: Nicodemus Msafiri John Mbwambo)</p> <p>39 - Multicloud API Binding Generation from Documentation (Presenter: Michal Gajda)</p> | <p>292 - Texture Transfer Attention for Realistic Image Completion (Presenter: Yejin Kim)</p> <p>216 - Marlo's Networks of Expectations (Presenter: Marcos Bautista López Aznar)</p> <p>199 - Utilizing AI in Test Automation to Perform Functional Testing on Web Application (Presenter: Dalia Alameleh)</p> <p>75 - Applying the Delphi Method to Measure Enterprise Content Management Workflow System Performance (Presenter: Hisham AbouGrad)</p> <p>257 - A Voting Ensemble Technique for Gas Classification (Presenter: Muhammad Jaleel)</p> <p>80 - Complete Blood Analysis: An Android OCR-based Interpretation (Presenter: Malik Almaliki, Elsayed Atlam)</p> <p>161 - Refined Optimal Control Problem and its Solution using Symbolic Regression (Presenter: Askhat Diveev)</p> | <p>85 - Speed Harmonisation Strategy for Human-Driven and Autonomous Vehicles Co-existence (Presenter: Frank Ekene Ozioko)</p> <p>86 - Road Intersection Coordination Scheme for Mixed Traffic (Human Driven and Driver-less Vehicles): A Systematic Review (Presenter: Frank Ekene Ozioko)</p> <p>229 - Compass Errors in Mobile Augmented Reality Navigation Apps: Consequences and Implications (Presenter: David S. Bowers)</p> <p>299 - Virtual Reality as a Powerful Persuasive Technology to Change Attitude during the Spread of COVID-19 (Presenter: Alami Sara)</p> <p>17 - Selection of Driving Mode in Autonomous Vehicles based on Road Profile and Vehicle Speed (Presenter: Mahmoud Zaki Iskandarani)</p> <p>175 - Wearable Internet of Things (IoT) Device Model Design based on Low-Cost Healthcare Monitoring System for Current Covid-19 Disease (Presenter: Edgar Rodrigo González Campos)</p> <p>10 - A Matching Mechanism for Provision of Housing to the Marginalized (Presenter: Julius Aguma)</p> | <p>142 - A Two-Way Atomic Exchange Protocol for Peer-to-Peer Data Trading (Presenter: Ching-Chun Huang)</p> <p>130 - Secure Multi-Party Data Controller with IPFS for Blockchain Systems (Presenter: Saad Alshihri)</p> <p>238 - A Blockchain Approach for Exchanging Machine Learning Solutions over Smart Contracts (Presenter: Sanket Shanbhag)</p> <p>4 - A Multi-Layered Ontological Approach to Blockchain Technology (Presenter: Riuparna Bhattacharya)</p> <p>3 - eMudra: A Leftover Foreign Currency Exchange System Utilizing the Blockchain Technology (Presenter: Rituparna Bhattacharya)</p> <p>293 - Untangling the Overlap between Blockchain and DLTs (Presenter: Bellaj Badr)</p> <p>100 - Blockchain Industry Implementation and Use Case Framework: A Survey (Presenter: Gabriela Ziegler)</p> |

| Session 11 - Data Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Session 12 - Natural Language Processing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Session 13 - Quantum Computing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Session 14 - Smart Healthcare                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Session 15 - Machine Vision                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| <p>218 - Wind Turbine Surface Defect Detection Analysis from UAVs using U-Net Architecture (Presenter: Hassnaa Hasan Shaheed)</p> <p>234 - Extraction of Consumer Emotion using Diary Data on Purchasing Behavior (Presenter: Yuzuki Kitajima)</p> <p>140 - Increasing Importance of Analog Data Processing (Presenter: Shuichi Fukuda)</p> <p>8 - Application of the Proposed Thresholding Method for Rice Paddy Field Detection with Radarsat-2 SAR Imagery Data (Presenter: Kohei Arai)</p> <p>401 - Centralized Data Driven Decision Making System for Bangladeshi University Admission (Presenter: Mahady Hasan)</p> <p>276 - Predicting Traffic Indexes on Urban Roads based on Public Transportation Vehicle Data in Experimental Environment (Presenter: Milen Petrov, George Yosifov)</p> | <p>47 - Dialog Act Segmentation and Classification in Vietnamese (Presenter: Luong Chi Tho)</p> <p>151 - EasyChat: A Chat Application for Deaf/Dumb People to Communicate with the General Community (Presenter: Wijenayake. W.W.G.P.A)</p> <p>165 - Social Media Self-Expression as Form of Coping during the 2020 Pandemic Lockdown (Presenter: Macrina Lazo)</p> <p>7 - Sentiment Analysis on Depression Detection: A Review (Presenter: Norma Mohamad Nor)</p> <p>414 - On Sensitivity of Deep Learning based Text Classification Algorithms to Practical Input Perturbations (Presenter: Samiksha Jagadale)</p> <p>273 - Applying Latent Dirichlet Allocation Technique to Classify Topics on Sustainability using Arabic Text (Presenter: Islam Alqudah)</p> | <p>319 - Quantum Computation by Means of Josephson Junctions Made of Coherent Domains of Liquid Water (Presenter: Luigi Maxmilian Caligiuri)</p> <p>303 - The Threat of Quantum Computing to SMEs (Presenter: Paulina Schindler)</p> <p>350 - Quantum Computing in Agent-based Technologies (Presenter: Tammy Fuller)</p> <p>283 - The Machine Learning Principles based at the Quantum Mechanics Postulates (Presenter: Huber Nieto-Chaupis)</p> <p>424 - Simulating the Arnaoutova-Kleinman Model of Tubular Formation at Angiogenesis Events Through Classical Electrodynamics (Presenter: Huber Nieto-Chaupis)</p> | <p>256 - Automatic Speech-based Smoking Status Identification (Presenter: Zhizhong Ma)</p> <p>258 - Efficiency of Local Binarization Methods in Segmentation of Selected Objects in Echocardiographic Images (Presenter: Joanna Sorysz)</p> <p>251 - A Method of Hepatocytes Segmentation in Microscopic Images of Trypan Blue Stained Cellular Suspension (Presenter: Wojciech Witariski)</p> <p>266 - Using Technology to Create Personalised Environments for Dementia Care: Results of an Empathy Map Study (Presenter: Ronny Broekx)</p> <p>282 - Corona Virus and Entropy of Shannon at the Cardiac Cycle: A Mathematical Model (Presenter: Huber Nieto-Chaupis)</p> <p>368 - Independent Component Analysis for Spectral Unmixing of Raman Microscopic Images of Single Human Cells (Presenter: M. Hamed Mozaffari)</p> | <p>236 - GCANet: A Cross-Modal Pedestrian Detection Method based on Gaussian Cross Attention Network (Presenter: Peiran Peng)</p> <p>95 - Mask Compliance Detection on Facial Images (Presenter: Lakshmi Babu-Saheer)</p> <p>201 - Rectifying Homographies for Stereo Vision: Analytical Solution for Minimal Distortion (Presenter: Pasquale Lafiosca)</p> <p>300 - Statistical Analysis of Electroencephalographic Signals in the Stimulation of Energy Data Visualizations (Presenter: Omer Faruk Kucukler)</p> <p>31 - Urban Tree Detection and Species Classification using Aerial Imagery (Presenter: Mahdi Maktabdar Oghaz)</p> <p>166 - Automatic Classification of Felsic, Mafic, and Ultramafic Rocks in Satellite Images from Palmira and La Victoria, Colombia (Presenter: Saulo Bosquez)</p> |



| Session 16 - Data Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Session 17 - Natural Language Processing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Session 18 -e-Learning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Session 19 - Deep Learning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Session 20 - Security                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| <p>74 - Analytical Decision-Making System based on the Analysis of Air Pollution in the City of Nur-Sultan (Presenter: Zhibek Sarsenova)</p> <p>296 - Online Quantitative Research Methodology: Reflections on Good Practices and Future Perspectives (Presenter: Giusi Antonia Toto)</p> <p>432 - Ambient Intelligence in Learning Management System (LMS) (Presenter: Ilan Daniels Rahimi OAC)</p> <p>337 - Scalable Shapeoid Recognition on Multivariate Data Streams with Apache Beam (Presenter: Athanasios Tsitsipas)</p> <p>185 - Addition-based Algorithm to Overcome Cover Problem during Anonymization of Transactional Data (Presenter: Monsan Apo Chimène)</p> <p>325 - Markov Chains for High Frequency Stock Trading Strategies (Presenter: Cesar Almiñana)</p> <p>377 - New Trends in Big Data Profiling (Presenter: Duncan Dubugras Alcoba Ruiz)</p> <p>174 - Draw-n-Replace: A Novel Interaction Technique for Rapid Human-Correction of AI Semantic Segmentation (Presenter: Ji Eun Kim)</p> | <p>383 - A Survey of Artificial Intelligence Techniques for User Perceptions' Extraction from Social Media Data (Presenter: Sarang Shaikh)</p> <p>240 - One Step Beyond: Keyword Extraction in German Utilising Surprisal from Topic Contexts (Presenter: Max Kölbl)</p> <p>97 - Enriching Contextualized Representations with Biomedical Ontologies: Extending KnowBert to UMLS (Presenter: Guilhem Piat)</p> <p>115 - Natural Language Processing using Database Context (Presenter: Zheni Mincheva)</p> <p>411 - SHAQ: Single Headed Attention with Quasi-Recurrence (Presenter: Sangeet Dandona)</p> <p>108 - Dynamic Topic Modeling Reveals Variations in Online Hate Narratives (Presenter: Rick Sear)</p> <p>310 - An Improved Bayesian TRIE based Model for SMS Text Normalization (Presenter: Niladri Chatterjee)</p> <p>96 - ConDef: Automated Context-Aware Lexicography using Large Online Encyclopedias (Presenter: Houjun Liu, Zachary Sayyah)</p> | <p>391 - Lessons Learnt during the COVID-19 Pandemic: Preparing Tertiary Education in Japan for 4IR (Presenter: Adam Lee Miller)</p> <p>176 - A Conceptual Framework for the Development of Argumentation Skills using CSCL in a Graduate Students' Research Course (Presenter: Petronella van der Merwe)</p> <p>280 - Camcorder as an e-Learning Tool (Presenter: Marina Boronenko)</p> <p>121 - Smartphone in Detecting Developmental Disability in Infancy (Presenter: Igor Val Danilov)</p> <p>407 - Barriers for Lecturers to Use Open Educational Resources and Participate in Inter-University Teaching Exchange Networks (Presenter: Paul Greiff)</p> <p>123 - Learning Analytics for Knowledge Creation and Inventing in K-12: A Systematic Review (Presenter: Mikko-Ville Apiola)</p> <p>402 - Battle Card, Card Game for Teaching the History of the Incas through Intelligent Techniques (Presenter: Javier Humpire)</p> <p>226 - Single Access for the Use of Information Technology in University Education during the SARS-CoV-2 Pandemic (Presenter: José Luis Cendejas Valdez)</p> | <p>135 - Linear Block and Convolutional MDS Codes to Required Rate, Distance and Type (Presenter: Ted Hurley)</p> <p>408 - A Review of Unsupervised Machine Learning Frameworks for Anomaly Detection in Industrial Applications (Presenter: Ari Happonen)</p> <p>314 - An Adaptive Geometry and Dual Graph Approach to Sign Prediction for Weighted and Signed Networks (Presenter: Nguyen Ngoc Nam)</p> <p>11 - Towards Tackling QSAT Problems with Deep Learning and Monte Carlo Tree Search (Presenter: Ruiyang Xu)</p> <p>103 - Multi-Object On-Line Tracking as an Ill-Posed Problem: Ensemble Deep Learning at the Edge for Spatial Re-identification (Presenter: Vasanth Iyer)</p> <p>415 - An Ensemble-based Machine Learning for Predicting Fraud of Credit Card Transactions (Presenter: Tahani Baabdullah)</p> <p>177 - Autonomous Vision-based UAV Landing with Collision Avoidance using Deep Learning (Presenter: Tianpei Liao)</p> <p>222 - Causal Probabilistic based Variational Autoencoders Capable of Handling Noisy Inputs using Fuzzy Logic Rules (Presenter: Usef Faghihi)</p> | <p>235 - Cyber-Safety Awareness: Assisting Schools in Implementation Guidelines (Presenter: Elmarie Kritzingner)</p> <p>144 - Developing a Webpage Phishing Attack Detection Tool (Presenter: Abdulrahman Almutairi)</p> <p>116 - Leveraging Zero Trust Security Strategy to Facilitate Compliance to Data Protection Regulations (Presenter: Jean-Hugues Migeon)</p> <p>344 - Perspectives from 50+ Years' Practical Zero Trust Experience and Learnings on Buyer Expectations and Industry Promises (Presenter: Yuri Bobbert)</p> <p>345 - An Evaluation Model Supporting IT Outsourcing Decision for Organizations (Presenter: Alessandro Annarelli)</p> <p>336 - Protecting Privacy using Low-Cost Data Diodes and Strong Cryptography (Presenter: Andre Frank Krause)</p> <p>25 - Design and Analysis of Pre-Formed ReRAM-based PUF (Presenter: Taylor Wilson)</p> <p>193 - A Graph Theoretical Methodology for Network Intrusion Fingerprinting and Attack Attribution (Presenter: Chuck Easttom)</p> |

| Session 21 - Data Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Session 22 - Natural Language Processing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Session 23 - Artificial Intelligence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Session 24 - Human Computer Interaction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Session 25 - Security                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| <p>254 - Working Towards an AI-based Clustering of Airports, in the Effort of Improving Humanitarian Disaster Preparedness (Presenter: Maria Browarska)</p> <p>69 - Customer Response Modeling using Ensemble of Balanced Classifiers (Presenter: Suncica Rogic)</p> <p>117 - A Local Geometry of Hyperedges in Hypergraphs, and its Applications to Social Networks (Presenter: Lin Xing)</p> <p>264 - Significance in Machine Learning and Data Analytics Techniques on Oceanography Data (Presenter: Osama "Sam" Abuomar)</p> <p>50 - Understanding COVID-19 Vaccine Reaction through Comparative Analysis on Twitter (Presenter: Mayank Kejriwal)</p> <p>30 - Nonexistence of a Universal Algorithm for Traveling Salesman Problems in Constructive Mathematics (Presenter: Linglong Dai)</p> <p>113 - An Improved Architecture of Group Method of Data Handling for Stability Evaluation of Cross-Sectional Bank on Alluvial Threshold Channels (Presenter: Hossein Bonakdari)</p> | <p>420 - Building Wikipedia N-grams with Apache Spark (Presenter: Kazem Taghva)</p> <p>59 - Selecting NLP Classification Techniques to Better Understand Causes of Mass Killings (Presenter: Abigail Sticha)</p> <p>324 - Supervised Negative Binomial Classifier for Probabilistic Record Linkage (Presenter: Harish Kashyap, Kiran Byadarhaly)</p> <p>413 - A Recipe for Low-Resource NMT (Presenter: Eryk Wdowiak)</p> <p>287 - How does the Thread Level of a Comment affect its Perceived Persuasiveness? A Reddit Study (Presenter: Lu Xiao)</p> <p>281 - Language Use and Susceptibility in Online Conversation (Presenter: Jinfen Li)</p> <p>385 - Sentiment Analysis on Citizenship Amendment Act of India 2019 using Twitter Data (Presenter: Kalpdrum Passi)</p> | <p>98 - On the Modelling of Species Distribution: Logistic Regression versus Density Probability Function (Presenter: João Bioco)</p> <p>14 - Artificial Intelligence Tools for Actuator Fault Diagnosis of an Unmanned Underwater Vehicle (Presenter: Silvio Simani)</p> <p>180 - Problem Structuring Combined with Sentiment Analysis to Product-Service System Performance Management (Presenter: Ingrid Saiala Cavalcante de Souza Feitosa)</p> <p>173 - Influences of Coating and Spandex Compositions of Conductive Textiles used as Strain Sensors using an Automated Test System (Presenter: Phillip Petz)</p> <p>27 - Unsupervised Machine Learning Methods for City Vitality Index (Presenter: Jean-Sébastien Dessureault)</p> <p>194 - Examining Correlation between Trust and Transparency with Explainable Artificial Intelligence (Presenter: Arnav Kartikeya)</p> <p>136 - A Fuzzy Epigenetic Model for Representing Degradation in Engineered Systems (Presenter: Maria Seale, Alicia Ruvinsky)</p> | <p>230 - Analysis of Technical Factors in Interactive Media Arts, with a Focus on Prix Ars Electronica Award Winners (Presenter: Yeeun Jo)</p> <p>245 - A Standard Content for University Websites using Heuristic Evaluation (Presenter: Aslina Baharum)</p> <p>378 - Influence of Augmented Reality on Purchase Intention (Presenter: Andrija Bernik)</p> <p>381 - Development of a Mobile Application to Provide Employment Information to Private-Sector Workers in Peru (Presenter: José Sulla-Torres)</p> <p>291 - Usability Evaluation of Mobile Application Software Mockups (Presenter: Fray L. Becerra-Suarez)</p> <p>263 - Silence in Dialogue: A Proposal and Prototype for Psychotherapy (Presenter: Aurelio Lopez-Lopez)</p> <p>252 - Virtual Critical Care Unit (VCCU): A Powerful Simulator for e-Learning (Presenter: Daniel Milhomme)</p> <p>253 - Encountering Pinchas Gutter in Virtual Reality and as a "Hologram" (Presenter: Cayo Gamber)</p> | <p>26 - Using Memory Forensics to Investigate Security and Privacy of Facebook (Presenter: Ahmad Ghafarian)</p> <p>139 - Hash based Encryption Schemes using Physically Unclonable Functions (Presenter: Dina Ghanai)</p> <p>425 - Noise-Augmented Privacy-Preserving Empirical Risk Minimization with Dual-purpose Regularizer and Privacy Budget Retrieval and Recycling (Presenter: Fang Liu)</p> <p>84 - Immunizing Files against Ransomware with Koalafied Immunity (Presenter: William Hutton)</p> <p>244 - Secured Digital Oblivious Pseudorandom and Linear Regression Privacy for Connected Health Services (Presenter: Renuka Mohanraj)</p> <p>138 - Hardware Implementation for Analog Key Encapsulation based on ReRAM PUF (Presenter: Manuel Aguilar Rios)</p> <p>141 - Bit Error Rate Analysis of Pre-formed ReRAM-based PUF (Presenter: Saloni Jain)</p> |