TIME (London) BST / UTC +1	Thu July 14	Fri July 15	
01:00 PM - 01:30 PM	Opening Ceremony	Session 11 - Data Science Session 12 - Natural Language Processing Session 13 - Quantum Computing	
01:30 PM - 02:00 PM	Networking	Session 14 - Smart Healthcare Session 15 - Machine Vision	
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 Session 2 - Computing Session 3 - Robotics Session 4 - Deep Learning Session 5 - Security	Session 16 - Data Science Session 17 - Natural Language Processing Session 18 - e-Learning Session 19 - Deep Learning Session 20 - Security	
06:00 PM - 07:30 PM	Session 6 - Data Science Session 7 - Computing Session 8 - Artificial Intelligence Session 9 - Ambient Intelligence Session 10 - Blockchain	Session 21 - Data Science Session 22 - Natural Language Processing Session 23 - Artificial Intelligence Session 24 - Human Computer Interaction Session 25 - Security	
07:30 PM - 08:00 PM	Virtual Roundtable - Al for Healthcare Data Analysis	Virtual Roundtable - Digital Twin	
08:00 PM - 08:30 PM	Day Closing	Closing Ceremony	

Paper Presentations

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

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

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

Session 16 - Data Science Session 17 - Natural Language Processing	ssion 18 -e-Learning	Session 19 - Deep Learning	Session 20 - Security
System based on the Analysis of Air Pollution in the City of Nur- Sultan (Presenter: Zhibek Sarsenova)Intelligence Techniques for User 	 P-19 Pandemic: Preparing y Education in Japan for esenter: Adam Lee Miller) Conceptual Framework Development of entation Skills using CSCL aduate Students' Research e (Presenter: Petronella van erwe) Camcorder as an e- ng Tool (Presenter: Marina enko) martphone in Detecting pmental Disability in y (Presenter: Igor Val y) Barriers for Lecturers to ben Educational Resources rticipate in Inter- sity Teaching Exchange rks (Presenter: Paul Greiff) earning Analytics for edge Creation and ng in K-12: A Systematic y (Presenter: Mikko-Ville Battle Card, Card Game for ng the History of the Incas h Intelligent Techniques nter: Javier Humpire) ingle Access for the Use rmation Technology in sity Education during the CoV-2 Pandemic 	 135 - Linear Block and Convolutional MDS Codes to Required Rate, Distance and Type (Presenter: Ted Hurley) 408 - A Review of Unsupervised Machine Learning Frameworks for Anomaly Detection in Industrial Applications (Presenter: Ari Happonen) 314 - An Adaptive Geometry and Dual Graph Approach to Sign Prediction for Weighted and Signed Networks (Presenter: Nguyen Ngoc Nam) 11 - Towards Tackling QSAT Problems with Deep Learning and Monte Carlo Tree Search (Presenter: Ruiyang Xu) 103 - Multi-Object On-Line Tracking as an III-Posed Problem: Ensemble Deep Learning at the Edge for Spatial Re-identification (Presenter: Vasanth Iyer) 415 - An Ensemble-based Machine Learning for Predicting Fraud of Credit Card Transactions (Presenter: Tahani Baabdullah) 177 - Autonomous Vision-based UAV Landing with Collision Avoidance using Deep Learning (Presenter: Tianpei Liao) 222 - Causal Probabilistic based Variational Autoencoders Capable of Handling Noisy Inputs using Fuzzy Logic Rules 	235 - Cyber-Safety Awareness: Assisting Schools in Implementation Guidelines (Presenter: Elmarie Kritzinger) 144 - Developing a Webpage Phishing Attack Detection Tool (Presenter: Abdulrahman Almutairi) 116 - Leveraging Zero Trust Security Strategy to Facilitate Compliance to Data Protection Regulations (Presenter: Jean- Hugues Migeon) 344 - Perspectives from 50+ Years' Practical Zero Trust Experience and Learnings on Buyer Expectations and Industry Promises (Presenter: Yuri Bobbert) 345 - An Evaluation Model Supporting IT Outsourcing Decision for Organizations (Presenter: Alessandro Annarelli) 336 - Protecting Privacy using Low-Cost Data Diodes and Strong Cryptography (Presenter: Andre Frank Krause) 25 - Design and Analysis of Pre- Formed ReRAM-based PUF (Presenter: Taylor Wilson) 193 - A Graph Theoretical Methodology for Network Intrusion Fingerprinting and Attack Attribution (Presenter: Chuck Easttom)

Friday, July 15, 2022 | 06:00 PM - 07:30 PM (London Time)

Paper Presentations

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