

TIME (LONDON BST UTC +1)	Thu, 15 July 2021	Fri, 16 July 2021
12:00 PM - 1:00 PM	OPENING & NETWORKING	DAY 2 OPENING & YOGA/ MINDFULNESS SESSION
1:00 PM - 2:00 PM	KEYNOTE: JACK DONGARRA	KEYNOTE: NADIA MAGNENAT-THALMANN
2:00 PM - 2:30 PM	VIRTUAL ROUNDTABLES	VIRTUAL ROUNDTABLES
2:30 PM - 4:00 PM	SESSION 1: COMPUTING SESSION 2: DEEP LEARNING SESSION 3: DATA SCIENCE SESSION 4: SECURITY SESSION 5: SMART CITIES	SESSION 16: HUMAN COMPUTER INTERACTION SESSION 17: BLOCKCHAIN SESSION 18: MACHINE VISION SESSION 19: DIGITAL TRANSFORMATION SESSION 20: E-LEARNING
4:00 PM - 5:00 PM	KEYNOTE: STEPHEN GROSSBERG	TUTORIAL: HERMANN KAINDL
5:00 PM - 6:30 PM	SESSION 6: COMPUTING SESSION 7: DEEP LEARNING SESSION 8: DATA SCIENCE SESSION 9: SECURITY SESSION 10: SMART CITIES	SESSION 21: CLOUD COMPUTING SESSION 22: SMART HEALTHCARE SESSION 23: MACHINE VISION SESSION 24: ARTIFICIAL INTELLIGENCE SESSION 25: E-LEARNING
6:30 PM - 7:00 PM	VIRTUAL ROUNDTABLES	VIRTUAL ROUNDTABLES
7:00 PM - 8:30 PM	SESSION 11: COMPUTING SESSION 12: DEEP LEARNING SESSION 13: DATA SCIENCE SESSION 14: SECURITY SESSION 15: SMART HEALTHCARE	SESSION 26: AGENTS AND MULTI-AGENT SYSTEMS SESSION 27: NEURAL NETWORKS SESSION 28: COMMUNICATION SESSION 29: SOCIAL COMPUTING SESSION 30: NATURAL LANGUAGE PROCESSING
8:30 PM - 9:00 PM	VIRTUAL RADIO	CLOSING CEREMONY

SESSION 1: COMPUTING	SESSION 2: DEEP LEARNING	SESSION 3: DATA SCIENCE	SESSION 4: SECURITY	SESSION 5: SMART CITIES
<p>276 - Computer Scientist's and Programmer's View on Quantum Algorithms (Presenter: Ilie-Daniel Gheorghe-Pop)</p> <p>141 - Towards AGI: Cognitive Architecture based on Hybrid and Bionic Principles (Presenter: Roman Dushkin)</p> <p>234 - DevOps for Open Source Multimedia Frameworks (Presenter: Juan Zhao)</p> <p>452 - Computational Power of a Hybrid Algorithm for Solving the Multiple Knapsack Problem with Setup (Presenter: Mhand hifi)</p> <p>255 - Multi-population Genetic Algorithm with the Actor Model Approach to Determine Optimal Braking Torques of the Articulated Vehicle (Presenter: Szymon Tengler)</p> <p>295 - PDSA Computing (Presenter: Shuichi Fukuda)</p> <p>92 - Solving High-dimensional Nonlinear Equations with Infinite Solutions by the SVM Visualization Method (Presenter: Jeng-Nan Tzeng)</p> <p>282 - Analytical View on Non-invasive Measurement of Moving Charge by Various Topologies of Wannier Qubit (Presenter: Krzysztof Pomorski)</p>	<p>63 - Predicting the Product Life Cycle of Songs on the Radio (Presenter: Oliver Fuglsang Grooss)</p> <p>471 - An Approach for Non-Deterministic and Automatic Detection of Learning Styles with Deep Belief Net (Presenter: Maxwell Ndogkon Manga)</p> <p>480 - Depth Self-Optimized Learning Toward Data Science (Presenter: Ziqi Zhang)</p> <p>175 - Optimizing the Neural Architecture of Reinforcement Learning Agents (Presenter: Ilya Trofimov)</p> <p>70 - Using Machine Learning to Identify Methods Violating Immutability (Presenter: Tamás Borbély)</p> <p>46 - Approaching Deep Convolutional Neural Network for Biometric Recognition based on Fingerprint Database (Presenter: Tanhim Islam)</p> <p>293 - On the Use of a Sequential Deep Learning Scheme for Financial Fraud Detection (Presenter: Georgios Zioviris)</p> <p>390 - A Systematic Review of Educational Data Mining (Presenter: ShaoJie Qu)</p>	<p>474 - The Challenges of Using Big Data in the Consumer Credit Sector (Presenter: Kirill Romanyuk)</p> <p>448 - Mathematical Model to Support Decision-making to Ensure the Efficiency and Stability of Economic Development of the Republic of Kazakhstan (Presenter: Askar Boranbayev)</p> <p>349 - Prediction Interval of Future Waiting Times of the Two-Parameter Exponential Distribution under Multiply Type II Censoring (Presenter: Shu-Fei Wu)</p> <p>61 - Top of the Pops: A Novel Whitelist Generation Scheme for Data Exfiltration Detection (Presenter: Michael Cheng Yi Cho)</p> <p>398 - Using Correlation and Network Analysis for Researching Intellectual Competence (Presenter: Yana Sipovskaya Ivanovna)</p> <p>160 - Analysis of the Vegetation Index Dynamics on the Base of Fuzzy Time Series Model (Presenter: Fuad Salmanov)</p> <p>113 - Result Prediction using Data Mining (Presenter: Hasan Sarwar)</p>	<p>220 - Incremental Dendritic Cell Algorithm for Intrusion Detection in Cyber-Physical Production Systems (Presenter: Rui Pinto)</p> <p>96 - Security in Distributed Ledger Technology: An Analysis of Vulnerabilities and Attack Vectors (Presenter: Efthimios-Enias Gojka)</p> <p>291 - TFHE Parameter Setup for Effective and Error-free Neural Network Prediction on Encrypted Data (Presenter: Jakub Klemsa)</p> <p>251 - Performance Comparison between Deep Learning-based and Conventional Cryptographic Distinguishers (Presenter: Matteo Rossi)</p> <p>260 - Towards Automated Surveillance: A Review of Intelligent Video Surveillance (Presenter: Romas Vijeikis)</p> <p>5 - ARCSECURE: Centralized Hub for Securing a Network of IoT Devices (Presenter: Chamath Samarasekara)</p> <p>466 - Improving the Imperceptibility of Pixel Value Difference and LSB Substitution based Steganography using Modulo Encoding (Presenter: Ahmad Azkiyai)</p> <p>436 - Effectiveness and Adoption of NIST Managerial Practices for Cyber Resilience in Italy (Presenter: Giulia Palombi)</p>	<p>88 - MQTT based Power Consumption Monitoring with Usage Pattern Visualization using Uniform Manifold Approximation and Projection for Smart Buildings (Presenter: Raymark C. Parocha)</p> <p>102 - A Deep Convolutional Neural Network Approach for Plant Leaf Segmentation and Disease Classification in Smart Agriculture (Presenter: Rachid Lghoul)</p> <p>120 - Deepened Development of Industrial Structure Optimization and Industrial Integration of China's Digital Music under 5G Network Technology (Presenter: Yukun Li)</p> <p>311 - LoRa RSSI based Outdoor Localization in an Urban Area using Random Neural Networks (Presenter: Winfred Ingabire)</p> <p>110 - Low-cost Digital Twin Framework for 3D Modeling of Homogenous Urban Zones (Presenter: Emad Felemban)</p> <p>203 - Medium Resolution Satellite Image Classification System for Land Cover Mapping in Nigeria (Presenter: Nzurumike L. Obianuju)</p> <p>239 - Optimal Solution of Transportation Problem with Effective Approach Mount Order Method: An Operational Research Tool (Presenter: Mohammad Rashid Hussain)</p> <p>456 - Street Owl. A Mobile App to Reduce Car Accidents (Presenter: Bahjat Fakieh)</p>

SESSION 6: COMPUTING	SESSION 7: DEEP LEARNING	SESSION 8: DATA SCIENCE	SESSION 9: SECURITY	SESSION 10: SMART CITIES
<p>74 - Scaling out Transformer Models for Retrosynthesis on Supercomputers (Presenter: Joris Mollinga)</p> <p>374 - The Design of Customizable Distributed Algorithms for InDiGO Framework (Presenter: Valeriy Kolesnikov)</p> <p>473 - A Novel GPU Implementation for Image Stripe Noise Removal (Presenter: Pasquale De Luca)</p> <p>381 - Resolution of the Frobenius Problem with an Adiabatic Quantum Computer (Presenter: Jose Maria Tornero, J. Ossorio-Castillo)</p> <p>87 - Designing a Cost-Efficient Network for a Small Enterprise (Presenter: Fahimeh Jafari)</p> <p>241 - Staff Rostering Optimization: Ideal Recommendations vs. Real-world Computing Challenges (Presenter: Jari Kyngäs)</p> <p>484 - A Layered Framework for Dealing with Dilemmas in Artificial Intelligence Systems (Presenter: Jim Q. Chen)</p>	<p>432 - Accelerating Deep Convolutional Neural on GPGPU (Presenter: Marcin Pietron)</p> <p>176 - Automatic Ensemble of Deep Learning using KNN and GA Approaches (Presenter: Ben Zagagy)</p> <p>259 - DeepObfusCode: Source Code Obfuscation through Sequence-to-Sequence Networks (Presenter: Siddhartha Datta)</p> <p>257 - A Deep Learning Model for Data Synopses Management in Pervasive Computing Applications (Presenter: Panagiotis Fountas)</p> <p>284 - A Novel Model for Enhancing Fact-checking (Presenter: Fatima T. AlKhawaldeh)</p> <p>372 - Evolutionary Computation Approach for Spatial Workload Balancing (Presenter: Ahmed Abubahia)</p> <p>320 - Hierarchical Roofline Performance Analysis for Deep Learning Applications (Presenter: Charlene Yang)</p> <p>406 - Predicting Resource Usage in Edge Computing Infrastructures with CNN and a Hybrid Bayesian Particle Swarm Hyper-Parameter Optimization Model (Presenter: John Violos)</p>	<p>89 - Development of an Oceanographic Databank based on Ontological Interactive Documents (Presenter: Maryna Popova)</p> <p>357 - GeoTree: A Data Structure for Constant Time Geospatial Search Enabling a Real-time Property Index (Presenter: Robert Miller)</p> <p>358 - Application of Data-driven Fault Diagnosis Design Techniques to a Wind Turbine Test-rig (Presenter: Silvio Simani)</p> <p>332 - Data Segmentation via t-SNE, DBSCAN, and Random Forest (Presenter: Timothy DeLise)</p> <p>313 - A New Proposal of Parametric Similarity Measures with Application in Decision Making (Presenter: Luca Anzilli)</p> <p>1 - Automated Data Processing of Bank Statements for Cash Balance Forecasting (Presenter: Vlad-Marius Griguta)</p> <p>51 - Predictive Models as Early Warning Systems: A Bayesian Classification Model to Identify At-risk Students of Programming (Presenter: Veerasamy Ashok Kumar)</p> <p>131 - Balanced Weighted Label Propagation (Presenter: Matin Pirouz)</p>	<p>250 - Application of Machine Learning in Cryptanalysis Concerning Algorithms from Symmetric Cryptography (Presenter: Milena Gjorgjievska Perusheska)</p> <p>15 - Cybercrime in the Context of COVID-19 (Presenter: Mohamed Chawki)</p> <p>204 - Authentication Mechanisms and Classification: A Literature Survey (Presenter: Milen Petrov)</p> <p>205 - Beware of Unknown Areas to Notify Adversaries: Detecting Dynamic Binary Instrumentation Runtimes with Low-level Memory Scanning (Presenter: Federico Palmaro, Luisa Franchina)</p> <p>319 - Homicide Prediction using Sequential Features from Graph Signal Processing (Presenter: Juan Moreno)</p> <p>437 - Secondary Use Prevention in Large-Scale Data Lakes (Presenter: Shizra Sultan)</p> <p>218 - A Security Requirement Engineering Case Study: Challenges and Lessons Learned (Presenter: Ilham Maskani)</p> <p>32 - Elliptic Curves of Nearly Prime Order (Presenter: Manoj Gyawali)</p>	<p>327 - Autonomous Vehicle Decision Making & Urban Infrastructure Optimization (Presenter: George Mudrak)</p> <p>105 - Smart Helmet: An Experimental Helmet Security Add-on (Presenter: Paulo Fazendeiro)</p> <p>18 - Prediction of Road Congestion Through Application of Neural Networks and Correlative Algorithm to V2V Communication (NN-CA-V2V) (Presenter: Mahmoud Iskandarani)</p> <p>453 - Urban Planning to Prevent Pandemics: Urban Design Implications of BiocyberSecurity (BCS) (Presenter: Lucas Potter)</p> <p>38 - A Smart City Hub based on 5G to Revitalize Assets of the Electrical Infrastructure (Presenter: Santiago Gil)</p> <p>109 - Analysis of Improved User Experience when using AR in Public Spaces (Presenter: Vladimir Souza)</p> <p>376 - VR in Heritage Documentation (Presenter: Wael Abdelhameed)</p> <p>366 - Analysis of Prediction and Clustering of Electricity Consumption in the Province of Imbabura-Ecuador for the Planning of Energy Resources (Presenter: Jhonatan F. Rosero-Garcia)</p>

SESSION 11: COMPUTING	SESSION 12: DEEP LEARNING	SESSION 13: DATA SCIENCE	SESSION 14: SECURITY	SESSION 15: SMART HEALTHCARE
<p>106 - An Array Abstraction to Amortize Reasoning About Parallel Client Code (Presenter: Alan Weide)</p> <p>367 - Cell Assembly-Based Task Analysis (CAbTA) (Presenter: Chris Huyck)</p> <p>285 - Naming Processes in Multichannels with Beeps in the Weak Model (Presenter: Layla S. Aldawsari)</p> <p>104 - An Iterative Randomized Rounding Algorithm for the k-Clustering Minimum Completion Problem with an Application in Telecommunication Field (Presenter: Shohre Sadeghsa)</p> <p>206 - Computational Optimization of Voids on 3D Woven Composites Truss Structures during Infusion (Presenter: Spiridon Koutsonas)</p> <p>62 - Orca: A Software Library for Parallel Computation of Symbolic Expressions via Remote Evaluation on MPI Systems (Presenter: Ahmet Artu Yildirim)</p> <p>94 - Parallel Accurate and Reproducible Summation (Presenter: Farah Benmouhoub, Martel Matthieu)</p> <p>391 - Distributed Evolution of Deep Autoencoders (Presenter: Jeff Hajewski)</p>	<p>181 - DRAM-based Processor for Deep Neural Networks without SRAM Cache (Presenter: Eugene Tam)</p> <p>472 - Enduring Questions, Innovative Technologies: Educational Theories Interface with AI (Presenter: Rosemary Papa, Karen Moran Jackson)</p> <p>273 - Deep-Reinforcement-Learning-based Scheduling with Contiguous Resource Allocation for Next-Generation Wireless Systems (Presenter: Shu Sun)</p> <p>375 - Investigating Learning in Deep Neural Networks using Layer-wise Weight Change (Presenter: Atharva Tendle)</p> <p>16 - Study of Residual Networks for Image Recognition (Presenter: Mohammad Sadegh Ebrahimi)</p> <p>148 - Data Augmentation for Short-term Time Series Prediction with Deep Learning (Presenter: Hugo Tito-Chura)</p> <p>395 - Deep Reinforcement Learning for Task Planning of Virtual Characters (Presenter: Caio Souza)</p> <p>163 - Image Classification with A-MnasNet and R-MnasNet on NXP Bluebox 2.0 (Presenter: Prasham Shah)</p>	<p>20 - Analyzing Music Genre Popularity (Presenter: Salem Othman)</p> <p>169 - Analyzing Societal Bias of California Police Stops Through Lens of Data Science (Presenter: Sukanya Manna)</p> <p>26 - Impact of Types of Change on Software Defect Prediction (Presenter: Atakan Erdem)</p> <p>310 - Youden's J and the Bi Error Method (Presenter: MaryLena Bleile)</p> <p>208 - A Disease Similarity Technique using Biological Process Functional Annotations (Presenter: Luis David Licea Torres)</p> <p>85 - Analyzing Co-occurrence Networks of Emojis on Twitter (Presenter: Salem Othman)</p> <p>328 - Automated Metadata Harmonization using Entity Resolution and Contextual Embedding (Presenter: Kunal Sawarkar, Meenakshi Kodati)</p> <p>150 - A Systematic Literature Review on Big Data Extraction, Transformation and Loading (ETL) (Presenter: Joshua C. Nwokeji)</p>	<p>81 - A Response-based Cryptography Engine in Distributed-Memory (Presenter: Christopher Philabaum)</p> <p>211 - Assessing Small Institutions' Cyber Security Awareness using Human Aspects of Information Security Questionnaire (HAIS-Q) (Presenter: Glenn Papp)</p> <p>269 - Construction of Differentially Private Empirical Distributions from a Low-order Marginals Set through Solving Linear Equations with L2 Regularization (Presenter: Fang Liu)</p> <p>60 - Locating the Perpetrator: Industry Perspectives of Celebrite Education and Roles of GIS Data in Cybersecurity and Digital Forensics (Presenter: Denise Dragos)</p> <p>41 - Tamper Sensitive Ternary ReRAM-based PUFs (Presenter: Bertrand Cambou)</p> <p>40 - An Analysis of Twitter Security and Privacy using Memory Forensics (Presenter: Ahmad Ghafarian)</p> <p>469 - Securing Mobile Systems GPS and Camera Functions Using TrustZone Framework (Presenter: Ammar S. Salman)</p> <p>449 - Steganographic Method to Data Hiding in RGB Images using Pixels Redistribution Combining Fractal-based Coding and DWT (Presenter: Vianney Muñoz-Jimenez)</p>	<p>283 - An IoT based Epilepsy Monitoring Model (Presenter: Ella Pereira)</p> <p>130 - Biostatistics in Biomedicine and Informatics (Presenter: Esther Pearson)</p> <p>86 - Effect of Adaptive Histogram Equalization of Orthopedic Radiograph Images on the Accuracy of Implant Delineation using Active Contours (Presenter: Adam Piorkowski)</p> <p>28 - Automatic Detection and Segmentation of Liver Tumors in Computed Tomography Images: Methods and Limitations (Presenter: Odai S. Salman)</p> <p>210 - Feature Analysis for Aphasic or Abnormal Language Caused by Injury (Presenter: Aurelio Lopez-Lopez)</p> <p>124 - IoT for Diabetics: A User Perspective (Presenter: Moutaz Haddara)</p> <p>289 - Case Study: UML Framework of Obesity Control Health Information System (Presenter: Majed Alkhusaili)</p> <p>280 - Identification Diseases using Apriori Algorithm on DevOps (Presenter: Aya Mohamed Morsy)</p>

Friday, July 16 | 2:30 PM - 4:00 PM (BST/UTC+1)

SESSION 16: HUMAN COMPUTER INTERACTION	SESSION 17: BLOCKCHAIN	SESSION 18: MACHINE VISION	SESSION 19: DIGITAL TRANSFORMATION	SESSION 20: E-LEARNING
<p>2 - Application of Robotics to Domestic and Environmental Cleanup Tasks (Presenter: Ian D. Walker)</p>	<p>59 - Blockchain Smart Contracts Static Analysis for Software Assurance (Presenter: Suzanna Schmeelk)</p>	<p>185 - MQTT based Appliance Control and Automation with Room Occupancy Monitoring using YOLO (Presenter: Erees Queen B. Macabebe)</p>	<p>209 - The Impact of Agile Methods and “DevOps” on Day 2+ Operations for Large Enterprises (Presenter: R. Cherinka)</p>	<p>132 - Embodied Learning: Capitalizing on Predictive Processing (Presenter: Susana Sanchez)</p>
<p>57 - Gamification in a Learning Resource for the Study of Human Computer Interaction (Presenter: Dawn Carmichael)</p>	<p>396 - Committee Selection in DAG Distributed Ledgers and Applications (Presenter: Bartosz Kusmierz)</p>	<p>190 - Development of an Automatic Document to Digital Record Association Feature for a Cloud-based Accounting Information System (Presenter: Daniel S. Jabonete)</p>	<p>17 - Explainable Graph-based Search for Lessons-learned Documents in the Semiconductor Industry (Presenter: Hasan Abu Rasheed)</p>	<p>303 - Augmented Reality in Virtual Classroom for Higher Education during COVID-19 Pandemic (Presenter: Priyaadharshini M)</p>
<p>433 - Humans Digital Avatar Reconstruction for Tactical Situations Animation (Presenter: Ilya Zuev)</p>	<p>55 - CreditX: A Decentralized and Secure Credit Platform for Higher Educational Institutes based on Blockchain Technology (Presenter: Romesh Liyanage)</p>	<p>48 - Guided Filter Bank (Presenter: Hui Yin)</p>	<p>314 - Machine Learning Application in LAPIS Agile Software Development Process (Presenter: Nurdan Canba)</p>	<p>56 - Cognitive Load of Ontology as a Means of Information Representation in the Educational Process (Presenter: Maryna Popova)</p>
<p>172 - Machine Learning Control for Mobile Robot by Approximation Extremals by Symbolic Regression (Presenter: Askhat Diveev)</p>	<p>115 - An Architecture for Blockchain-based Cloud Banking (Presenter: Thuat Do)</p>	<p>277 - High-speed Multi-person Tracking Method using Bipartite Matching (Presenter: Alexander Khelvas)</p>	<p>476 - Mapping Risk Assessment Strategy for COVID-19 Mobile Apps’ Vulnerabilities (Presenter: Masooda Bashir)</p>	<p>324 - Development and Design of a Library Information System Intended for Automation of Processes in Higher Education Institution (Presenter: Askar Boranbayev)</p>
<p>330 - Action Recognition in Handball Scenes (Presenter: Marina Ivasic-Kos)</p>	<p>394 - A Robust and Efficient Micropayment Infrastructure using Blockchain for e-Commerce (Presenter: Soumaya Bel haj Youssef)</p>	<p>413 - Hierarchical Feature Generating Network for Zero-Shot Learning by Knowledge Graph (Presenter: Yi Zhang)</p>	<p>470 - Factors Influencing the Adoption of Online Banking in South Africa: An UTAUT Study (Presenter: Mathias Mujinga)</p>	<p>123 - The Influence of Computer Games on High School Students (Presenter: Andrija Bernik)</p>
<p>164 - RF Mapping for Sensor Nodes Connectivity and Communication Signal Recovery (Presenter: Mustafa Ayad)</p>	<p>195 - An Exploration of Blockchain in Social Networking Applications (Presenter: Rituparna Bhattacharya)</p>	<p>402 - Learning Action Correlation and Temporal Aggregation for Group Representation (Presenter: Haoting Wang)</p>	<p>457 - Transforming HR and Improving Talent Profiling with Qualitative Analysis Digitalization on Candidates for Career and Team Development Efforts (Presenter: Ari Happonen)</p>	<p>34 - Accrediting Artificial Intelligence Programs from the Omani and the International ABET Perspectives (Presenter: Osama A. Marzouk)</p>
<p>315 - Towards Synchronous Model of Non-Emotional Conversational Gesture Generation in Humanoids (Presenter: Aditi Singh)</p>	<p>268 - Promize - Blockchain and Self Sovereign Identity Empowered Mobile ATM Platform (Presenter: Eranga Bandara)</p>	<p>412 - Self-adaptive Perception Model for Action Segment Detection (Presenter: Jiahe Li)</p>	<p>355 - Consumer-Oriented Web of Things Solution for Competitive Swimmers (Presenter: Rusko Yonit)</p>	<p>325 - Improving Student Engagement and Active Learning with Embedded Automated Self-Assessment Quizzes (Presenter: Ryan M. Gibson)</p>
<p>27 - DBA-Filter: A Dynamic Background Activity Noise Filtering Algorithm for Event Cameras (Presenter: Sherif Mohamed)</p>	<p>71 - Real and Virtual Token Economy Applied to Games: A Comparative Study between Cryptocurrencies (Presenter: Isabela Ruiz Roque da Silva)</p>		<p>333 - Improving the Efficiency of Industrial Enterprise Management based on the Forge Software-Analytical Platform (Presenter: Arsen Ivanyan)</p>	<p>378 - Pedagogical Approaches in Computational Thinking-Integrated STEAM Learning Settings (Presenter: Ashok Kumar Veerasamy)</p>

SESSION 21: CLOUD COMPUTING	SESSION 22: SMART HEALTHCARE	SESSION 23: MACHINE VISION	SESSION 24: ARTIFICIAL INTELLIGENCE	SESSION 25: E-LEARNING
<p>30 - Robustness Comparison of Scheduling Algorithms in MapReduce Framework (Presenter: Jim Q. Chen)</p> <p>461 - Cyber Security in Cloud: Risk Assessment Models (Presenter: Carlos Bendicho)</p> <p>155 - Developing a Framework of Critical Factors Affecting the Adoption of Cloud Computing in Government Systems (ACCE-GOV) (Presenter: Naif Al Mudawi)</p> <p>7 - In-place VM Migration for Fast Update of Hypervisor Stack (Presenter: Pavel Tatashin)</p> <p>6 - Seamless Update of a Hypervisor Stack (Presenter: Pavel Tatashin)</p>	<p>288 - Towards Collecting Big Data for Remote Photoplethysmography (Presenter: Mikhail Petrushan)</p> <p>270 - Data Security in Health Systems: Case of Cameroon (Presenter: Igor Godefroy Kouam Kamdem)</p> <p>422 - Framework for a DLT based COVID-19 Passport (Presenter: Michael Clear)</p> <p>440 - Towards the Localisation of Lesions in Diabetic Retinopathy (Presenter: Samuel Ofofu Mensah)</p> <p>8 - HEMAYAH: A Proposed Mobile Application System for Tracking and Preventing COVID-19 Outbreaks in Saudi Arabia (Presenter: Reem Alwashmi)</p> <p>66 - Predicting Levels of Depression and Anxiety in People with Neurodegenerative Memory Complaints Presenting with Confounding Symptoms (Presenter: Dalia Attas)</p> <p>299 - Towards Digital Twins Driven Breast Cancer Detection (Presenter: Safa Meraghni)</p>	<p>441 - Comparing Partitions: Metric Characterizations, Mean Partition, and Distortion (Presenter: Estefano Reyes)</p> <p>477 - Self-exciting Point Processes with Image Features as Covariates for Robbery Modeling (Presenter: Mateo Dulce Rubio)</p> <p>450 - A Preliminary Comparison Between Compressive Sampling and Anisotropic Mesh-based Image Representation (Presenter: Xianping Li)</p> <p>50 - Web-based Learning for Cultural Adaptation: Constructing a Digital Portal for Persian Speaking Immigrants in Finland (Presenter: Zahra Hosseini)</p> <p>416 - Enhanced Reinforcement Learning Model for Extraction of Objects in Complex Imaging (Presenter: Usman Ahmad Usmani)</p> <p>415 - Improving Accuracy and Latency in Image Re-Identification by Gallery Database Cleansing (Presenter: Niall O' Mahony)</p> <p>309 - Modular Image Synthesizer for Annotated Test Sets on Incremental Parameter Fields (Presenter: Benny Platte)</p> <p>219 - Real-time Crack Detection using ROV (Presenter: Haythem El-Messiry)</p>	<p>118 - Adjusted Bare Bones Fireworks Algorithm to Guard Orthogonal Polygons (Presenter: Adis Alihodzic, Bosnia and Herzegovina)</p> <p>166 - Artificial Intelligence Against Climate Change (Presenter: Leila Scola)</p> <p>80 - Accelerating Road Sign Ground Truth Construction with Knowledge Graph and Machine Learning (Presenter: Ji Eun Kim)</p> <p>114 - Construction Site Layout Planning using Multiple-level Simulated Annealing (Presenter: Hui Jiang, YaBo Miao)</p> <p>331 - Entropy based Feature Pooling in Speech Command Classification (Presenter: Christoforos Nalmpantis)</p> <p>297 - Unsupervised Machine Learning-based Elephant and Mice Flow Identification (Presenter: Muna Al-Saadi)</p> <p>407 - Automated Generation of Zigzag Carbon Nanotube Models Containing Haecelkite Defects (Presenter: Roberto Rozas)</p> <p>481 - Epistocracy Algorithm: A Novel Hyper-Heuristic Optimization Strategy for Solving Complex Optimization Problems (Presenter: Seyed Ziae Mousavi Mojab)</p>	<p>318 - The Teaching and Learning of the Untyped Lambda Calculus through Web-based e-Learning Tools (Presenter: Levis Zerpa)</p> <p>78 - Tips for using Open Educational Resources to Reduce Textbook Costs in Computing and IT Courses (Presenter: Richard Halstead-Nussloch, Rebecca Rutherford)</p> <p>121 - The Impact of Computer Games on Preschool Children's Cognitive Skills (Presenter: Dolores Kamenar Cokor)</p> <p>202 - Exploring the Darkness of Gamification: You Want it Darker? (Presenter: Tobias Nystrom)</p> <p>122 - Informally Teaching Black Youth STEM Concepts Virtually using Artificial Intelligence and Machine Learning (Presenter: Darron Lamkin)</p> <p>117 - The Future of Information and Communication Technology Courses (Presenter: Leila Goosen)</p> <p>455 - Using STEM to Improve Computer Programming Teaching (Presenter: Manuel Rodrigues)</p> <p>446 - Development of Anaglyph 3D Functionality for Cost-Effective Virtual Reality Anatomical Education (Presenter: Alex J. Deakyne)</p>

SESSION 26: AGENTS AND MULTI-AGENT SYSTEMS	SESSION 27: NEURAL NETWORKS	SESSION 28: COMMUNICATION	SESSION 29: SOCIAL COMPUTING	SESSION 30: NATURAL LANGUAGE PROCESSING
<p>72 - Dynamic Urban Planning: An Agent-based Model Coupling Mobility Mode and Housing Choice. Use Case Kendall Square (Presenter: Mireia Yurrita Semperena)</p> <p>341 - On Fairness in Voting Consensus Protocols (Presenter: Sebastian Muller)</p> <p>445 - Investigating the Robustness and Generalizability of Deep Reinforcement Learning based Optimal Trade Execution Systems (Presenter: Siyu Lin)</p> <p>187 - Analysis of the MFC Singularities of Speech Signals using Big Data Methods (Presenter: Volodymyr Osadchyy)</p> <p>103 - Reasoning in the Presence of Silence in Testimonies: A Logical Approach (Presenter: Alfonso Garces-Baez)</p> <p>401 - A Genetic Algorithm based Approach for Satellite Autonomy (Presenter: Sidhharth Sikka)</p> <p>39 - Communicating Digital Evolutionary Machines (Presenter: Istvan Elek)</p>	<p>286 - Benchmarking of Fully Connected and Convolutional Neural Networks on Face Recognition: Case of Makeup and Occlusions (Presenter: Stanislav Selitskiy)</p> <p>108 - Wavelet Neural Network Model with Time-frequency Analysis for Accurate Share Prices Prediction (Presenter: Yaqing Luo)</p> <p>65 - A Hybrid Method for Training Convolutional Neural Networks (Presenter: Paulo Fazendeiro)</p> <p>264 - Small-world Propensity in Developmental Dyslexia after Visual Training Intervention (Presenter: Tihomir Taskov)</p>	<p>323 - Artificial Life: Investigations about a Universal Osmotic Paradigm (UOP) (Presenter: Bernhard Heiden)</p> <p>245 - Cross-cultural Design of Simplified Facial Expressions (Presenter: Ichi Kanaya)</p> <p>382 - Embedded Piezoelectric Array for Measuring Relative Distributed Forces on Snow Skis (Presenter: Andres Rico, Carson Smuts)</p> <p>431 - Misinformation and its Stakeholders in Europe: A Web-based Analysis (Presenter: Emmanouil Koulas)</p> <p>182 - Experimental Study of a Tethered Balloon using 5G Antenna to Enhance Internet Connectivity (Presenter: Samirah A. Alhusayni)</p> <p>111 - Latency and Throughput Advantage of Leaf-Enforced Quality of Service in Software-Defined Networking for Large Traffic Flows (Presenter: Josiah Eleazar T. Regencia)</p> <p>199 - The Impact of Online Social Networking (Social Media) on Interpersonal Communication and Relationships (Presenter: Tang Mui Joo)</p>	<p>21 - Automatic Extraction of Emojiset (Presenter: Salem Othman)</p> <p>84 - Word Frequency Analysis of Community Reaction to Religious Violence on Social Media (Presenter: Carly Seigel, Samah Senbel)</p> <p>307 - Approximate Analysis of Deviant Behavior on Social Media (Presenter: Anton Ivaschenko)</p> <p>317 - Investigating the Characteristics of the Response Waiting Time in a Chat Room (Presenter: Gibson .O Ikoru)</p> <p>411 - Some Socio-demographic Usage Patterns in Ephemeral Content Sharing Social Networks: The Case of Snapchat (Presenter: Ons Al-Shamaileh)</p> <p>465 - Public Reaction on Social Media during COVID-19: A Comparison between Twitter and Weibo (Presenter: Tian Wang)</p> <p>428 - How Twitter Interactions Leak Political Trends (Presenter: Marc Solé Farre)</p>	<p>429 - Causal BERT: Language Models for Causality Detection between Events Expressed in Text (Presenter: Vivek Khetan)</p> <p>287 - Measuring Meaning (Presenter: Ignazio Mauro Mirto)</p> <p>54 - Solving the Story Cloze Test using Graph Feature Extraction (Presenter: Nathaniel Grabaskas)</p> <p>384 - VBSRL: A Semantic Frame-based Approach for Data Extraction from Unstructured Business Documents (Presenter: Simone Scannapieco)</p> <p>385 - Generating Correction Candidates for OCR Errors using BERT Language Model and FastText SubWord Embeddings (Presenter: Kazem Taghva)</p> <p>365 - MegaLite-2: An Extended Bilingual Comparative Literary Corpus (Presenter: Luis-Gil Moreno-Jiménez)</p> <p>321 - Social Media Mining for Business Intelligence Analytics: An Application for Movie Box Office Forecasting (Presenter: Belén Usero, Virginia Hernández)</p>