

Agenda - Computing Conference 2024 (Virtual)

11-12 July 2024 | London, United Kingdom

computing
conference 2024

| TIME (London) BST/UTC+1 | Thu July 11 | Fri July 12 |
|----------------------------|--|--|
| 09:00 AM | Delegates Login | Delegates Login |
| 09:30 AM - 11:00 AM | Opening + Keynote Talks <ul style="list-style-type: none">Giancarlo Guizzardi (University of Twente)Chris Mitchell (Royal Holloway, University of London) | Keynote Talks <ul style="list-style-type: none">Liangxiu Han (Manchester Metropolitan University)John Shalf (Lawrence Berkeley National Laboratory) |
| 11:00 AM - 11:30 AM | Break | Break |
| 11:30 AM - 12:30 PM | Paper Presentations | Paper Presentations |
| 12:30 PM - 01:30 PM | Lunch | Lunch |
| 01:30 PM - 03:15 PM | Paper Presentations | Paper Presentations |
| 03:15 PM - 03:30 PM | Break | Break |
| 03:30 PM - 05:00 PM | Paper Presentations | Paper Presentations |
| 05:00 PM Onwards | | Conference Closing |

Computing Conference 2024 | Day 1 - July 11, 2024

Session 1: Machine Learning

July 11 | 11:30 AM - 12:30 PM

- 186 - A Ride-Hailing Company Supply Demand Prediction Using Recurrent Neural Networks, GRU, and LSTM (**Sahand Fathi**)
- 199 - Cardiac MRI Semantic Segmentation for Ventricles and Myocardium Using Deep Learning (**Racheal Mukisa**)
- 176 - Categorizing Philanthropic CSR Activities Through Hybrid Approach of Fuzzy Clustering and Topic Modeling (**Nik Siti Madihah Binti Nik Mangsor**)
- 253 - DeepFake Detection Using Deep Learning (**Nazneen Mansoor**)
- 251 - Problems of Building Digital Twins of Escalators at Subway Stations Based on Machine Learning (**Alexey Subbotin**)

Session 2: Security

July 11 | 11:30 AM - 12:30 PM

- 82 - Simulation and Analysis of Cyber-Attack on Modbus Protocol for Smart Grids in Virtual Environment (**Shampa Banik**)
- 327 - Characterization of ReRAM Arrays Operating in the Pre-Formed Range to Design Reliable PUFs (**Taylor Wilson**)
- 17 - Investigating Privacy and Security of LinkedIn Via Forensics Analysis (**Ahmad Ghafarian**)
- 7 - Introduction of Steganography to Improve the Security of Transmitted Data (**Olga Manankova**)
- 233 - Secure Content Protection Schemes for Industrial IoT with SRAM PUF-Based One-Time Use Cryptographic Keys (**Saloni Jain**)

Session 3: Data Science

July 11 | 01:30 PM - 03:15 PM

- 88 - Introducing Prediction Concept into Data Envelopment Analysis Using Classifier in Economic Forecast (**Zijiang Yang**)
- 210 - Enhancing Explainability in Mobility Data Science Through a Combination of Methods (**Georgios Makridis**)
- 174 - Cross Approach Between Modern Artificial Intelligence and Emergency Medicine: A Review (**Kokou Iaris Edjinedja**)
- 187 - Kernelized Extension for Multiple-Expert-Learning Classifiers Using Support Vector Machines (**Diego h Peluffo-Ordóñez**)
- 34 - Designing a Technical Framework for Enabling Enterprise AI Adoption (**Nica Human**)
- 32 - Offensive Language Detection from Arabic Texts (**Arafat A. Awajan**)
- 283 - Suicide Ideation Prediction Through Deep Learning: An Integration of CNN and Bidirectional LSTM with Word Embeddings (**Christianah Oyewale**)
- 190 - An Analytical Investigation into the Impact of Product Color on the Price of Retail Products and Purchasing Decisions of Consumers (**Zaid Altukhi**)

Session 4: Computing

July 11 | 01:30 PM - 03:15 PM

- 175 - Development of UX Evaluation Tool in Digital Media Content Production: Focusing on the Mobile Environment (**Sokjong Jang**)
- 62 - Efficient Graph Encoder Embedding for Large Sparse Graphs in Python (**Xihan Qin**)
- 70 - Predictive Savings Service (**Ventsislav Nikolov**)
- 290 - Malaysian Local Fruits E-Marketplace System with Intelligent Promotional Feature (**Check-Yee Law**)
- 269 - Computing VUCA Way (**Shuichi Fukuda**)
- 331 - Energy Aware Workload Scheduling Metrics for Execution of Parallel Application in Heterogeneous Cloud Computing Platform (**Divyaprabha K N**)
- 83 - Is it Time for a Borderless Real Estate Platform? (**Walter Odhiambo**)

Session 5: Data Science

July 11 | 03:30 PM – 05:00 PM

- 312 - SGAN: Appliance Signatures Data Generation for NILM Applications Using GANs (Christina Gkoutroumpi)
- 25 - Cost Optimisation in Offshore Wind Through Procurement Data Analytics (Chinedu Pascal Ezenkwu)
- 259 - Comprehensive Feature Selection Methods for Predicting Diabetes and Stroke Risk (Alexander Iliev Iliev)
- 275 - Prediction of Load Time in Web Services for Different Agent Locations and Browsers for Mobile Devices (Jolanta Wrzuszczak-Noga)
- 319 - A Survey on the Usage of Centrality Measures in Error Prediction (Péter Marjai)
- 51 - Data Analysis, Socioeconomic Development and Communication of the Sugar Industry (Lilian Molina)
- 204 - GraphRank Pro+: Advancing Talent Analytics Through Knowledge Graphs and Sentiment-Enhanced Skill Profiling (Chandrashekar Muniyappa)
- 73 - Feature Selection Strategy for Short Term Electricity Consumption Forecasting (Marcia Hon)

Session 6: Computer Vision

July 11 | 03:30 PM – 05:00 PM

- 24 - SSIVD-Net: A Novel Salient Super Image Classification and Detection Technique for Weaponized Violence (Toluwani Aremu)
- 35 - Flight Plan Optimization, Scanning and 3D Reconstruction Using an Unmanned Aerial Vehicle (Andrija Bernik)
- 48 - Text Extraction and Recognition in Manga Comics Using Image Processing Techniques (Mohamed Al-Ibrahim)
- 238 - Gender Identification Using 2D Ear Biometric (Lavanya Srinivasan)
- 98 - Vehicular Connectivity Analysis Using Enhanced Quality Slotted ALOHA (EQS-ALOHA) (Mahmoud Zaki Iskandarani)
- 123 - CollaVRation: An Immersive Virtual Environment for Collaborative Software Development (Peter Kapec)
- 227 - Geo-Tagged 3D Geometric Modeling of Urban Structures by Mitigating Reflected GPS Signals Using a Laser Range Sensor (Ashwani Kumar)
- 262 - Multi-Camera Tracking Based on Spatio-Temporal Association in Small Overlapping Regions (Lap Quoc Tran)

Computing Conference 2024 | Day 2 - July 12, 2024

Session 7: Machine Learning

July 12 | 11:30 AM – 12:30 PM

- 357 - Applying Formal Methods to Elicit Specifications for Grid Data Analysis Applications Using Machine Learning Algorithms (Hannah Vinitha Subburaj)
- 30 - Weak Relation Enforcement for Kinematic-Informed Long-Term Stock Prediction with Artificial Neural Networks (Stanislav Selitskiy)
- 105 - A Modified Ant Colony Optimization with KNN for High-Dimensional Data Classification (Gideon Olasunbo Popoola)
- 394 - Multi-Modal Deep Learning for Detecting Toxicity in Transcribed-Audio Conversations (Ismail El Sayad)
- 255 - Sybil Attack Detection in VANETs Using CatBoost Classifier (EL Mehdi Fdil)

Session 8: Security

July 12 | 11:30 AM – 12:30 PM

- 139 - Decentralized Privacy-Preserving Solution Through Blockchain Smart Contracts and Spatial Cloaking for Ride Sharing Application (Aulia Arif Wardana)
- 33 - Examining the Privacy and Security of Mobile Refugee Applications (Suzanna Schmeelk)
- 324 - Enhancing True Random Number Generation in MRAM Devices Through Response Adjustment (Saloni Jain)
- 375 - DeepPayAuth: User Authentication in Mobile Payments Using Smartwatch Motion Sensors (Richard Matovu)
- 268 - An Anomaly Detection Framework for IIoT-Based Smart Farming Systems (Muaaz Noor)

Session 9: Artificial Intelligence

July 12 | 01:30 PM - 03:15 PM

- 286 - A Trust Model for Informed Agent Collaboration in Complex Tasks (Ricardo Manuel Pacheco Barbosa)
- 60 - Performance Analysis of Synthetic Events Via Visual Object Trackers (Sajid Javed)
- 344 - Selective Coordination Study in a Renewable Energy-Based Microgrid (Matthew Zorumski)
- 396 - An Intelligent Environment Application Case to Manage Comfort Preferences, at an University Residence (Pedro F Oliveira)
- 191 - A Comprehensive Literature Review on Slope Entropy Algorithm: Bridging Past Insights with Future Directions (Juan Segui Moreno)
- 352 - AI Based Commercial Decisions: The Cryptocurrency Market Case (Shnaps-Jehuda Domb-M)
- 378 - ChatGPT and Artificial Intelligence in Higher Education: Literature Review Powered by Artificial Intelligence (Andrija Bernik)
- 412 - Need for Cultural Sensitivity in the Design and Development of Technology to Aid in Dementia Care: A Review of Literature (Arshia Khan)
- 229 - Beyond Segmentation: Road Network Generation with Multi-Modal LLMs (Sumedh Rasal)

Session 10: Computing

July 12 | 01:30 PM - 03:15 PM

- 59 - Benchmarking Metaheuristic-Integrated QAOA Against Quantum Annealing (Arul Rhik Mazumder)
- 118 - Quantum Circuits for Fixed Matching Substring Problems (Caterina Viola)
- 155 - Model-Free Adaptive Fault-Tolerant Control for Offshore Wind Turbines (Silvio Simani)
- 284 - Inter-Qubit Correlation of Readout Noise in Near-Term Quantum Devices (Debasis Sadhukhan)
- 358 - Complexity Classification of Complex-Weighted Counting Acyclic Constraint Satisfaction Problems (Tomoyuki Yamakami)
- 165 - Digital Inclusion and Longevity: Evaluating the Usability of Emerging Technologies for the Elderly (Edesio Marcos Slomp)
- 15 - True Random Numbers from Pairs of SRAM Devices (Saloni Jain)

Session 11: Artificial Intelligence

July 12 | 03:30 PM - 05:00 PM

- 112 - Leveraging AI Language Models for Designing Contextually Responsive Built Environments (Sam Sabah)
- 189 - CRISP-DM User Mobility Determined IoT Placement Within a Real-World Smart Building for Resource Efficient Fog Computing Environments (Kelvin Lawal)
- 69 - A Comparative Study on Plant Diseases Using Object Detection Models (Ziaul Hossain)
- 296 - Detecting COVID-19 in Computed Tomography Images: A Novel Approach Utilizing Segmentation with UNet Architecture, Lung Extraction, and CNN Classifier (Esra Kaya Ayana)
- 201 - Attention U-Net Oriented Towards 3D Depth Estimation (Leonel Jaime Ocsa Sánchez)
- 101 - Application of Speech Signal for Early Screening of Children with Autism Spectrum Disorder (Nguyen Cong-Phuong)
- 392 - Action Unit Recognition: Leveraging Weak Supervision with Large Loss Rejection (Hima Vadapalli)
- 194 - Engineering Research Strategies for Investigating Long-Term Automation Effects, Behavioural Adaptation and Change Processes: Experts' Views (Naomi Y. Mbelekani)

Session 12: e-Learning

July 12 | 03:30 PM - 05:00 PM

- 161 - Designing an Automated Machine Learning Approach for Transformer Architecture in Education and Non-STEM Research Settings (Luke Gassmann)
- 137 - Introducing a High School Student to Systems Programming Via Bare Machine Computing (Alex Wijesinha)
- 231 - Accessibility of Online Educational and Scientific Resources (Todor Todorov)
- 337 - Making Learning Effective on Smart Mobile Online Educational Games (Eng Bah Tee)
- 315 - A Combined Competency-Based and Design-Based Research (DBR) Approach to Curriculum Development: Implications for Information Technology (IT) Programs (Grant Royd Howard)
- 402 - Students' Perceptions of ChatGPT in Education: A Rapid Systematic Literature Review (Belinda Mutunhu Ndlovu)
- 399 - Affect Analysis: A Literature Survey on Student-Specific and General Users' Affect Analysis (Hima Vadapalli)
- 236 - Towards Blended Learning: Students' Perceptions and Experiences of Mobile Learning in South Africa (Vusumzi Funda)