### Agenda - Future Technologies Conference (FTC) 2024

14-15 November 2024 | London, United Kingdom



TIME (London) GMT	Thu Nov 14	Fri Nov 15
09:00 AM	Delegates Login	Delegates Login
09:15 AM - 11:00 AM	Opening + Keynote Talks • Steven Pemberton, CWI, Amsterdam • Adrian Hilton, University of Surrey	<ul><li>Keynote Talks</li><li>Peter Triantafillou, University of Warwick</li><li>John Collomosse, Adobe Research</li></ul>
11:00 AM - 11:30 AM	Break	Break
11:30 AM - 12:30 PM	Paper Presentations <ul><li>Session 1: Robotics</li><li>Session 2: Artificial Intelligence</li><li>Session 3: Security</li></ul>	Paper Presentations <ul><li>Session 10: Data Science</li><li>Session 11: Ambient Intelligence</li><li>Session 12: Security</li></ul>
12:30 PM - 01:30 PM	Lunch Break	Lunch Break
01:30 PM - 03:15 PM	Paper Presentations <ul> <li>Session 4: Data Science</li> <li>Session 5: Artificial Intelligence</li> <li>Session 6: Computer Vision</li> </ul>	Paper Presentations <ul><li>Session 13: Data Science</li><li>Session 14: e-Learning</li><li>Session 15: Security</li></ul>
03:15 PM - 03:45 PM	Break	Break
03:45 PM - 05:00 PM	Paper Presentations <ul><li>Session 7: Deep Learning</li><li>Session 8: Technology Trends</li><li>Session 9: Computing</li></ul>	Paper Presentations Session 16: Deep Learning Session 17: Technology Trends Session 18: Computing
05:00 PM Onwards		Conference Closing

#### Future Technologies Conference 2024 | Day 1 - November 14, 2024

Session 1: Robotics November 14   11:30 AM - 12:30 PM	Session 2: Artificial Intelligence November 14   11:30 AM - 12:30 PM	Session 3: Security November 14   11:30 AM - 12:30 PM
468 - A Machine Learning-Based Household Robot (Razan Al-Hamed) 276 - Robotics Adoption in the Construction Sector: A	235 - No Podcast Ever Gets Made: A Case Study and Methodology for Human-Al Collaborative Storytelling Podcasts (Jeffrey T.K.V. Koh)	310 - Moving Beyond Traditional Incident Response: Combating APTs with Warfare-Enabled Continuous Response (Abid Shah)
Bibliometric Analysis of Current Research Trends and Future Directions (Kenneth Otasowie)  439 - Aerial Manipulator Control Based on Linear Algeb	41 - Development of an Al Based Failure Predictor Model to Reduce Filament Waste for a Sustainable 3D Printing Process (Omid Fatahi Valilai)	446 - Enabling Decentralized Applications in Disconnected Environments: An Ad-hoc Blockchain on a Wireless Mesh Network (Kohei Arai)
and Lyapunov Theories (Franklin M. Silva) 467 - Aerial Manipulator Robot Trajectory Tracking for	264 - IterSHAP: An XAI-Based Feature Selection Method for Small High-Dimensional Datasets (Faizan Ahmed)	139 - A Holistic Security Approach to Protect Cloud- Native Applications (Pedro R. Tomas)
Rhythmic Entertainment Applications (Cesar A. Naranjo) 469 - The Automated Guitarist: A Programmed-Based Musical Robot (Jihad Al-Sawda)	263 - EmoRoom: Unveiling Academic Emotions Through Interactive Visual Analytics in Classroom Videos (Rajamanickam Yuvaraj)	138 - A Novel Approach for Continual and Federated Network Anomaly Detection (Luis Cordeiro) 24 - Overcoming the Fear of Missing Out on Data (Yuri
Tradical Nobol (circular ii Carroll)	37 - GPT Models and Video Game Narrative: A Meta- Analysis of Language Model Studies (Andrija Bernik)	Bobbert)

## Session 4: Data Science November 14 | 01:30 PM - 03:15 PM

### 277 - Big Data Adoption in Construction and Demolition Waste Management (Kenneth Otasowie)

- 166 A Comparative Study of Machine Learning Algorithms on Datasets of Varying Sizes (Xiaoting Huang)
- 34 A Conditioned Unsupervised Regression Framework Attuned to the Dynamic Nature of Data Streams (René Richard)
- 77 A Neuromarketing Approach to Identify Consumer's Ties and Preferences Through Multivariate Data (Jesús Jaime Moreno Escobar)
- 404 Al to Detect Firms' Competitive Performance (Alessandro Bruno)
- 157 Analyzing E-Commerce Dynamics (Ashutosh Sagar)
- 177 City Recommender System (Dorsa Soleymani)
- 193 Enhancing Classification with Multimodality: A Hierarchical Approach to Fashion Item Categorization (Waly Ngom)

#### Session 5: Artificial Intelligence November 14 | 01:30 PM - 03:15 PM

### 211 - Fostering Trust and Quantifying Value of AI and ML (Veena Calambur)

- 318 Improved Agent-Based Learning Platform for Introductory Al (Ramoni O. Lasisi)
- 419 DADU: Dual Attention-Based Deep Supervised UNet for Automated Semantic Segmentation of Cardiac Images (Racheal Mukisa)
- 284 A General Purpose Device for Interaction with LLMs (Qun Wang)
- 429 Building an Electronic Health Record Knowledge Graph for the Mexican Health System (Fernando Xadir)
- 14 Content-Based Web Classifier System for Dementia Definitions Using Natural Language Processing (Diego Vallejo-Huanga)
- 400 Towards Designing a Graph-Based Clustering of Crime Reports Using Graph Learning Techniques (Haifa Al-Ibrahim)
- 282 Al-Assisted Academic Writing (Edward R Sykes)

# Session 6: Computer Vision November 14 | 01:30 PM - 03:15 PM

- 116 Automatic Detection of Common Gastroenterological Diseases Using a Small Dataset (Marcio Sarroglia Pinho)
- 231 Considerations for Successful Design and Development of Virtual Reality Tourism in the 21st Century (Lindsay Grace)
- 70 HAT: Homography-Based Alternate Training for Pose-Invariant Face Recognition (Bowen Sun)
- 261 Object Detection for Autonomous Vehicles in Urban Areas Using Deep Learning (Syed Muhammad Usman)
- 9 The Impact of 3D and AR Product Presentation on Mental Imagery, Product Uncertainty and User Experience (Marian Mc Donnell)
- 383 Times Square: A Time Series Dataset for Semi-Supervised Crowd Counting (Salma Alghamdi)
- 269 Towards Digital Zen (Amir Reza Asadi)
- 461 Utilizing Transfer Learning and Graph Matching Spatial Attentions from Using CARLA Pre-Trained Models (Vasanth lyer)

Session 7: Deep Learning November 14   03:45 PM - 05:00 PM	Session 8: Technology Trends November 14   03:45 PM - 05:00 PM	Session 9: Computing November 14   03:45 PM - 05:00 PM
63 - A Deep Learning Framework for Classifying and Mitigating Bias in News Reporting (Nandita Sengupta)	145 - Digitisation in the South African Construction Industry (Peter Adekunle)	398 - A Novel OO-Based Code Complexity Metric (H. A. N. N. Thathsarani)
459 - Advanced Traffic Safety Analysis: Leveraging Deep Learning and Large Language Models for Near-Crash Detection in Crowdsourced Videos (Shadi Jaradat)	<ul><li>5 - Digitisation of the Construction Industry for Economic Growth (Peter Adekunle)</li><li>437 - Exploring Women-Centric Health Technology</li></ul>	232 - Augmented Reality Storybook for Color-Blind Children: Enhancing Reading Experience (John Ivan C Maurat)
17 - Data Property Mitigator: Empowering Pneumonia Detection Using Deep Learning Models and Chest X- Rays (Hanan J. Farhat) 346 - Emotion Unleashed: Real-Time FER in Video via	Design (Kemi Akanbi)  196 - Governance Framework for Academic Verifiable Credentials Using KERI and ACDC (Marija Taneska)	466 - Autoadaptive Lattices of Magnetic Vortices in Coherent Domains of Condensed Matter for "Intelligent" Quantum Computing and Storing (Luigi Maxmilian Caligiuri)
Advanced Deep Learning Models (Alessandro Bruno) 207 - Exploring the Performance of Deep Learning	202 - Leveraging on Technologies Within Quality Management Systems for Enhanced Project Success in Construction (Peter Adekunle)	64 - Building Blocks to Empower Cognitive Internet with Hybrid Edge Cloud (Michel Burger)
Models for Neutrino Direction Prediction in High-Energy Astrophysics (Sandile Thamie Mhlanga)	252 - Low-Tech Methods for Rainwater Quality Analysis and Perspective Usage of Mobile Phone as a Diagnostic	438 - Generation of Student's Programming Exercises Using SCT Generator (Andrija Bernik)
90 - Improving Analytic Approximation of Log-Normal Interest Rate Model with Neural Network (Anna Knezevic)	Tool (Serge Rohmer)  171 - A Blockchain-Based Solution for the Security and Management of Electronic Medical Records (EMR) in Healthcare (Joseph Cox)	179 - Information Retrieval Systems: A Methodological Review (Johniel Babiera)

### Future Technologies Conference 2024 | Day 2 - November 15, 2024

Session 10: Data Science November 15   11:30 AM - 12:30 PM	Session 11: Ambient Intelligence November 15   11:30 AM - 12:30 PM	Session 12: Security November 15   11:30 AM - 12:30 PM
163 - Emotions and Customer Satisfaction in the Mobile Banking Era: An Empirical Analysis (Viviana Espinoza Loayza) 373 - An Approach for House Price Prediction Using Bayesian Regression (Hao Do) 223 - The Adoption of Electronic Payments in Online Shopping (Nguyen Thi Phuong Giang) 222 - Fast and Scalable Multi-Kernel Encoder Classifier (Cencheng Shen) 452 - GenDatr: Visualizing Probabilistic Data Generation in Medical Data Science (Dennis Wong) 194 - Lake Water Level Forecasting Using LSTM and GRU: A Deep Learning Approach (Yuxin Du)	358 - Case Study: Financial Returns of a Small Home On-Grid PV System vs. Off-Grid System for Water Heating (Matús Sásik) 258 - Design and Implementation of a Home Electricity Monitoring System (ElecTech) (Mustafa Ayad) 364 - Empowering Grid Resilience: Stakeholder Insights on Solar Energy Storage (Nikhil Jayaraj) 32 - Exploring Scalable User Mobility Impact on Energy Efficiency, Latency and Network Usage in Smart Homes (Kelvin N. Lawal) 122 - Foliar Chlorophyll Monitoring to Enhance Palm Oil Plant Productivity (Aznida Abu Bakar Sajak)	165 - A Novel Approach to Optimize Response-Based Cryptography for Secure Data Transmission (Saloni Jain) 299 - Revolutionizing Authentication in Blockchain (Volker Wannack) 114 - Analyzing the Correlation Between Employee Security Awareness and Cyberattack Vulnerability: A Quantitative Study (Mostafa Ahmadi) 191 - Deep Learning-Based Anomaly Detection in TLS Encrypted Traffic (Kehinde Ayano) 61 - Exploring Latent Fingerprint Synthesis with Diffusion Probabilistic Models (Jingqiao Wang)

Session 13: Data Science	
November 15   01:30 PM - 03:15 PM	М

## Session 14: e-Learning November 15 | 01:30 PM - 03:15 PM

## Session 15: Security November 15 | 01:30 PM - 03:15 PM

- 146 Optimization of Few-Shot Learning NER Models Through Grammatical Conditioning of Training Data (Tobias Dorrn)
- 178 Global Warming's Influence on Temperature Increase (Wisam Bukaita)
- 375 Pricing Data Based on Value: A Systematic Literature Review (Philipp Herrmann)
- 97 Security Analysis in Ecuador (Henry N. Roa)
- 435 Strategic Selection of ITIL v4 Services for Cybersecurity Defense (Abdelilah Chahid)
- 293 Systematic Literature Review and Bibliometric Analysis of Low-Resource Speech-To-Text Translation (D. Fortuné Kponou)
- 151 Training-Testing Data Ratio Selection for Accurate Time Series Forecasting (Guillermo Garcia de Celis)
- 428 Using Mixed Exponentials for Unsupervised Discretization (Dulan S. Dias)
- 458 Design Graph-Structured Dataset and Feature Selection for Cyber Threat Detection (Ukid Changsan)

- 186 A Systematic Review of Current Methods Used to Develop Professional Skills in Information Communication Technology Students in Higher Education (Ruobin He)
- 312 Choosing Virtual Reality for Military Training (Malgorzata Gawlik-Kobylinska)
- 129 Construction Safety Student Perceptions of Spatial Presence in Virtual Reality (Diane Guevara)
- 30 Enhancing Usability and User Experience Through User Onboarding in an Ecological Information App (Chia-yin Yu)
- 26 Game-Based Engagement Management System (Siegwart Mayr)
- 108 Nonlinear Model Predictive Control for Omnidirectional Robots (Jessica S. Ortiz)
- 173 STAR, a Universal, Repeatable, Strategic Model of Corporate Innovation for Industry Domination (Ronald Berman)
- 281 The Importance of Motivation in the Collaborative Learning Process in Pandemic and Post-Pandemic Undergraduate Students (Veronica Martinez Lazcano)

- 424 Hardware Implementation of Analog Keyless Encapsulation Using Preformed ReRAM PUF (Ashwija Reddy Korenda)
- 371 Investigating Ephemeral Messaging Apps on iPhone 14 (Tamirat Abegaz)
- 85 A Framework for TrustZone Encoding/Decoding for QR Buyer-Presented and VCC Offline Generated Payments (Ammar S. Salman)
- 75 Performance Evaluation of Response Based Cryptography Versus Fuzzy Extractors Based on Error Correction Codes (Ashiwja Reddy Korenda)
- 198 Secure Key Generation from Challenge-Response Pair Mechanisms with Commercial MRAM PUFs (Saloni Jain)
- 51 The Comparison of Random Forest and XGBoost in Malicious Browser Extensions Detection in Google Chrome Based on the Feature Importance (Jizhou Tong)
- 274 Towards Establishing the Role of LLMs in Botnet Detection (Sean T Miller)
- 29 Graph-Powered Mining and Analysis of SELinux Security Policies (Amir Eaman)

## Session 16: Deep Learning November 15 | 03:45 PM - 05:00 PM

- 341 Reinforcement Learning of Emerging Swarm Technologies (Afnan M. Alharbi)
- 316 Simulating Extreme Precipitation Phenomena Through Generative Adversarial Networks: Advancing Hydroclimatic Understanding (Yiyang Luo)
- 18 Speech Enhancement (Connie Zhu)
- 91 Towards Accurate Detection of Diabetic Retinopathy using Image Processing and Deep Learning (T.Sanduni Kumari Lanka Fernando)
- 257 A DNN Model-Based Behavioral System for Injury Detection and Rehabilitation (Sarra Abidi)
- 319 Gun Detection in Images Using Convolution Neural Networks (Ramoni O. Lasisi)

#### Session 17: Technology Trends November 15 | 03:45 PM - 05:00 PM

- 256 To Share or Not to Share (Leena Alghamdi)
- 279 Adopting Digital Technologies in Construction and Demolition Waste (C&DW) Management (Kenneth Otasowie)
- 200 A Comprehensive Study of BIM for Infrastructural Crack Detection and the Vital Strategies (Samuel Adekunle)
- 130 Towards Mixed Reality as the Everyday Computing Paradigm (Amir Reza Asadi)
- 153 Analyzing the Impact of Emotional Intelligence on Leadership in Construction 4.0 (Peter Adekunle)
- 49 Developing a Blockchain Based Supply Chain CO2 Footprint Tracking Framework Enabled by IoT (Omid Fatahi Valilai)
- 259 TandaPay Whistleblowing Communities: Shifting Workplace Culture Towards Zero-Tolerance Sexual Harassment Policies (Joshua Davis)

# Session 18: Computing November 15 | 03:45 PM - 05:00 PM

- 415 Practical Quantum Combinatorial String Matching (Francesco Pio Marino)
- 117 Spectrum Serenade: OPNET Expedition Unveiling WLAN 802.11e Performance Evaluation (Ali Mohd Ali)
- 406 Tamil-Based Mobile Application for the Identification of Anthurium Plant Diseases (Selveraja Rasikadevi)
- 413 TCAD Electrothermal Analysis of 3D GAAFET Structures for Future VLSI Circuits (Konstantin O. Petrosyants)
- 441 The Design and Development of School Cooperative System (Check-Yee Law)
- 384 WIRE: Write Energy Reduction via Encoding in Phase Change Main Memories (PCM) (Apoorva Rumale)