



## Day 1 — Parallel Session 1 (2025-10-28)

Time: 11:30–13:00 (Saudi Arabia Time)

### Main Hall — AI & ML ([Teams Link](#))

Moderators: Dr. Maher Mohammed Aseeri

| Time          | Paper Title                                                                                                        | Authors                                                                                                                            |
|---------------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 11:30 - 11:45 | Lightweight Deepfake Detection with EfficientNet-B7                                                                | Farkhana Muchtar, Prabhat Parikshit Potdar, Naif Rajkhan, and Salmah Fattah                                                        |
| 11:45 - 12:00 | Impact of IoT-Based Smart Waste Management System for Urban Zone                                                   | Kabeer Ahmed Bhatti, Muhammad Asif, Faryal Nosheen, Asim Ali, Muhammad Ehsan ul Haq, Muhammad Sohail, Bu Ali Sher                  |
| 12:00 - 12:15 | A Review of Amazon Web Services (AWS) Security Infrastructure Against Distributed Denial-of-Service (DDoS) Attacks | Widad Elbakri, Bander Ali Saleh Al-rimy, Yara Faheed Aldossari, Wesal Elbakree, Sultan Ahmed Almalki and Tami Abdulrahman Alghamdi |
| 12:15 - 12:30 | A Lightweight CNN Model for Classification of Tea Leaf Diseases in Sri Lanka                                       | Vijayakanthan Ganesalingam,, Maged Nasser, Ashraf Osman Ibrahim, Yara Faheed Aldossari                                             |
| 12:30 - 12:45 | OpenDia: An AI-Powered Diabetes Prediction and Health Guidance Platform                                            | Ismail Ahmed Al-Qasem Al-Hadi; Sia Yi Hng; Abdulalem Ali; Hossny Nabeeh Ghanem                                                     |
| 12:45 - 13:00 | Multi-Resolution Ensemble Learning for Extended-Horizon Wind Turbine Performance Degradation Prediction            | Muawiya Sadiq and Umar Salis Khalil                                                                                                |



## Hall 2 — Cybersecurity & Privacy ([Teams Link](#))

Moderators: Dr. Mohammed Al Shehri

| Time          | Paper Title                                                                                                                                                                     | Authors                                             |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| 11:30 - 11:45 | Data Encryption of Stored Data using Advanced Encryption Standard(AES) Compared with Elliptic Curve Cryptography(ECC) for Cloud Storage Mechanism                               | M. Siva Reddy, S. Christy, Panji Narputro           |
| 11:45 - 12:00 | Toward AI Integration in Digital Forensics: an Omani Perspective                                                                                                                | Nasser Al-Hadhrani, Sonia Soans, Mohammed Ambusaidi |
| 12:00 - 12:15 | The Absence of Vulnerabilities and the Impossibility of Successful Cyber-Attacks: a Time-Bound Perspective                                                                      | Nasser Al-Hadhrani                                  |
| 12:15 - 12:30 | Advancing Intrusion Detection Precision in Cognitive Radio-Enabled Vehicular Networks Using Random Forest in Comparison with k-Nearest Neighbors (KNN)                          | Athuru Tharun, S. Sivagami, Trisiani Dewi           |
| 12:30 - 12:45 | A Comparative Analysis of Deep Learning and Machine Learning Algorithms for Cyber Phishing                                                                                      | G. Sudheer Krishna, Gokul Gopan, Arny Lattu         |
| 12:45 - 13:00 | Analysis and Comparison Distributed Cluster Control Overhead Based-Routing Protocol with WIoT for Remote Healthcare System Using MALOC Protocol and Compared with ALOC Protocol | R. Ponrajesh, C. Senthilkumar, Hermanto             |



## Day 1 — Parallel Session 2 (2025-10-28)

Time: 14:30–16:30 (Saudi Arabia Time)

**Main Hall — Green Technology & Healthcare** ([Teams Link](#))

Moderators: Dr. Adel Sulaiman

| Time          | Paper Title                                                                                                                   | Authors                                                         |
|---------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| 14:30 - 14:45 | Efficient Prediction of Healthcare System Based on Cloud IOT Using Convolutional Neural Network with Recurrent Neural Network | M. Raganali Ganesh, G. Charlyn Pushpa Latha, Zeldi Suryadi      |
| 14:45 - 15:00 | Optimizing Predictive Performance for Lung Cancer Detection Using Data-Driven Methods                                         | Koyel R R, A. Hency Juliet, Sani Parwati                        |
| 15:00 - 15:15 | Automated Prediction of Water Potability Using Artificial Intelligence                                                        | Mursleen Butt, NZ Jhanjhi, Farzeen Ashfaq, Fikri Arif Wicaksana |
| 15:15 - 15:30 | Exploring Excessive GenAI Use in Higher Education: Demographic Insights and Emerging Addiction Risks                          | Nabil Hasan Al-kumaim, Abdulsalam K. Alhazmi                    |
| 15:30 - 15:45 | Multi-Objective Co-Optimization of Fuzzy Control and Sizing for PV-Hydrogen-Battery Systems Using Cuckoo Search               | Sofiane Berrazouane and Said Alem                               |
| 15:45 - 16:00 | Monkey Pox Detection Using SVM Algorithm Compared to XGboost to Improve Accuracy                                              | Meshach Paul Gracian, Rukmani, Indra Yustiana                   |
| 16:00 - 16:15 | AI-Enhanced Calibration of a Smart Battery Model for Digital Twin Readiness                                                   | Walid Merrouche; Badis Lekouaghet; Mohamed Benghanem            |
| 16:15 - 16:30 | Predicting Red Wine Quality Using Machine Learning Techniques                                                                 | Farhan Shokat, NZ Jhanjhi, Zaid Sulaiman                        |



## Hall 2 — Emerging Technologies & Trends ([Teams Link](#))

Moderators: Dr. Abdullah Alqahtani

| Time          | Paper Title                                                                                                                                | Authors                                                                                                |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| 14:30 - 14:45 | The Evolving Role of Information Systems in Smart Cities Development: Catalyzing Economic Growth in Saudi Arabia - a Bibliometric Analysis | Tahani Ali Hakami, Omar Sabri, and Abdulaziz Al-Nahari                                                 |
| 14:45 - 15:00 | Predicting Eye Strain Using Machine Learning Techniques                                                                                    | Vijayakanthan Ganesalingam,, Maged Nasser, Ashraf Osman Ibrahim, Yara Faheed Aldossari                 |
| 15:00 - 15:15 | Traditional vs. Modern Web Architectures: A Standards-Aligned Survey and Research Agenda                                                   | Md Nayeem, Md Azizul Hakim, Yead Rahman, Md Shah Jalal Mazumder, Tasnia Tabassum, Mehrab Hosain        |
| 15:15 - 15:30 | Effects of Blended Learning on the Learning Behaviors of IT Students in UTAS-Nizwa, Sultanate of Oman                                      | Rolando Jr Lontok, Alice M. Lontok, Abdulaziz Al-Nahari                                                |
| 15:30 - 15:45 | AI-Assisted Quran Memorization: A Cognitive and Motivational Evaluation                                                                    | Suad Said Ali Aldaghaishi, Elham Yahya Al-Alawi, Abdulaziz Aborujilah, and Hanan Khalfan Zayid Alsubhi |
| 15:45 - 16:00 | Real-Time anti-Sleep Alarm for Drowsiness Detection While Driving                                                                          | Mohammed AL Sulimani, Mohammed A. Ambusaidi, Narayanasamy Rajendran                                    |
| 16:00 - 16:15 | Quaternary Half Adder Design Using Spatial Wavefunction Switched FETs: An Emerging Nanostructure Technology for Multi Valued Logic         | Bander Saman                                                                                           |
| 16:15 - 16:30 | Integrating Conversational AI to Enhancing Customer Service in Saudi Businesses amid Global Events Opportunities                           | Fatimah Alhazeem and Eman Alyami                                                                       |



## Day 2 — Morning Papers (2025-10-29)

Time: 10:45–13:00 (Saudi Arabia Time)

### Main Hall — Smart Industrial Systems ([Teams Link](#))

Moderators: Dr. Nasser Al Hadhrami

| Time          | Paper Title                                                                                                                               | Authors                                                                                                                              |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 10:45 - 11:00 | A Review of Artificial Intelligence and Supply Chain Optimization for Typical Smart Grid Tasks                                            | Li Kerui and Arafat Al-Dhaqm and Noor Hasrina Bakar                                                                                  |
| 11:00 - 11:15 | A Decoupled Detection-Classification Image Recognition System for Transmission Line Inspection                                            | Li Kerui and Arafat Al-Dhaqm and Noor Hasrina Bakar                                                                                  |
| 11:15 - 11:30 | Exploring the Challenges, Impacts, and Sustainable Practices of Generative AI Use in Universities                                         | Nabil Hasan Saleh Al-kumaim,, Mohammed Nasser Al-Andoli, Abdulsalam K. Alhazmi                                                       |
| 11:30 - 11:45 | Enhancing Leather Dyeing Accuracy with an AI-Based Color Matching System                                                                  | Muhammad Nasir, Attique Ur Rehman, Tahir Mohammad Ali, Mohammad Kamran Khan and Fikri Arif Wicaksana                                 |
| 11:45 - 12:00 | Hybrid Grey Wolf Optimizer-Neural Network Framework for Long-term Electricity Demand Forecasting: A Multi-Scenario Computational Approach | Sofyan Sofyan,, Farkhana Muchtar, Naif Waheb Rajkhan, Usman Usman, Danlami Gabi, Samsul Ariffin Abdul Karim and Norazliani Md Sapari |
| 12:00 - 12:15 | Augmented Reality for Smart Coffee Farming: Detecting Coffee Rust Disease in Coffee Plants                                                | Ahmad Haikal Mohd Khairi, Maged Nasser, Khairul Shafee Kalid, Adel Sulaiman, Vijayakanthan Ganesalingam                              |
| 12:15 - 12:30 | Explainable Edge-AI for Bearing Fault Diagnosis: A Lightweight Approach for Industrial Deployment                                         | Umar Salis Khalil; Muawiya Sadiq                                                                                                     |
| 12:30 - 12:45 | Academic LoRaWAN Network Development and Vulnerability Analysis                                                                           | Ian King, Luke Halla, Benton Wilson, and Jia Song                                                                                    |
| 12:45 - 13:00 | Design and Evaluation of a Machine Learning-Powered Smart Socket for Residential Energy Management                                        | Mengseu Pheng, Channareth Srun Virbora Ny, Seven Siren, Norith Chealy, Sovathana Um, and VengSe Leng                                 |



## Hall 2 — Cybersecurity & Privacy ([Teams Link](#))

Moderators: Dr. Abdullah Alqahtani

| Time          | Paper Title                                                                                           | Authors                                                                                                                                 |
|---------------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 10:45 - 11:00 | Feedback Based Adaptive Segmentation: A Framework for Censorship Circumvention                        | Chuntao Li, and Asim Ali                                                                                                                |
| 11:00 - 11:15 | A Comprehensive Survey of Anomaly-Based Intrusion Detection Models for the Internet of Medical Things | Ahmed Muqdad Alnasrallah, Maheyzah Md Siraj, Hanan Ali Alrikabi, Ahmad M. Alkheder Almasabi and Muaadh A. Alsoufi                       |
| 11:15 - 11:30 | Developing a Methodical Model for Evaluating Cybersecurity Competency Among University Students       | Abdulaziz Aborujilah<br>Maha Abdulmalek Al-Ansi<br>Jawahir Binti Che Mustapha<br>Samir Hammami<br>Nasser Tabook<br>Elham Yahya Al-alawi |
| 11:30 - 11:45 | Privacy-Preserving Mobility Trajectory Generation in LBS: A Review of GAN-Based Approaches            | Jamilah Alamri, Nur Izura Udzir, Mohd Izuan Hafez Ninggal, Hamidah Ibrahim, Erzam Marlisah, Muaadh A. Alsoufi                           |
| 11:45 - 12:00 | A Theoretical Framework for Behavioural Shifting Ransomware Variants                                  | Umara Urooj; Faisal Ali Salem Al-Gowter; Bander Ali Saleh Al-Rimy; Sultan Ahmed Almalki; Tami Alghamdi; Mohammed Alqahtani              |
| 12:00 - 12:15 | Demonstrating a Denial of Service Attack Using the NTP Monlist Command                                | Benton Wilson, Braxton Marlatt, Matthew Murnin, Luke Halla, Caden Carter, and Jia Song                                                  |
| 12:15 - 12:30 | Literature Review of Rust Analysis Tools                                                              | Braxton Marlatt, Caden Carter, Chadwick Goodall, and Jia Song                                                                           |
| 12:30 - 12:45 | The Human Factor: A Review of Cognitive Vulnerabilities in Social Engineering Scams                   | Ray Patel, Abdulghani Ali Ahmed, Fahim Nasir, and Faisal Ali Salem Al-gowter                                                            |
| 12:45 - 01:00 | Detecting Cyber-Attacks in IoT Network Using Ensemble Learning                                        | Asma Babdullah and Samia Allaoua Chelloug                                                                                               |


**Hall 3 — AI & ML ([Teams Link](#))**
**Moderator:** Dr. Maher Mohammed Aseeri

| Time          | Paper Title                                                                                                                                                       | Authors                                                                                                       |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| 10:45 - 11:00 | Connected Response Using IoT for Ambulance Tracking and Coordination                                                                                              | Sai Prakash G., A Sai Ram, Gina Purnama Insany                                                                |
| 11:00 - 11:15 | Assessing Cognitive-Emotional Strain in Students Through Supervised Learning Techniques                                                                           | Shehroz Ali, NZ Jhanjhi, Farzeen Ashfaq, Dhita Diana Dwi                                                      |
| 11:15 - 11:30 | Improving Arabic Essay Grading with Deep Learning Models                                                                                                          | Bassam Al-Shargabi, Abdulaziz Al-Nahari, and Jamal Al Qundus                                                  |
| 11:30 - 11:45 | Enhanced SPECT-MRI Fusion Using Hybrid Swarm Intelligence                                                                                                         | Farkhana Muchtar, Prabhat Parikshit Potdar, Naif Waheb Rajkhan, and Salmah Fattah                             |
| 11:45 - 12:00 | Generalizable Deep Reinforcement Learning Model for Trading Across Diverse Markets                                                                                | Wong Xing Hao, Maged Nasser, Abdulrahman Alyami, Vijayakanthan Ganesalingam                                   |
| 12:00 - 12:15 | Merlina AI: A Retrieval-Augmented Generation Chatbot for Intelligent Engineering Documentation                                                                    | Cheng Pin-Jie, Maged Nasser, Naif Waheb Rajkhan, Vijayakanthan Ganesalingam                                   |
| 12:15 - 12:30 | "My Learning is Ongoing": Analyzing Patterns of Interaction in Computer-Supported Collaborative Learning Using Knowledge Building Discourse Explorer (KBDeX) Tool | Samar Ghazal , Raenu A/I Kolandaisamy, Umm E Mariya Shah, Amira Saif3, Bakri Hossain Awaji, and Abdulalem Ali |
| 12:30 - 12:45 | Deep Learning Based Method for Online Fake News Prediction                                                                                                        | Aiman Aqiff Aidi, Maged Nasser, Theeb R. Alqahtani, Vijayakanthan Ganesalingam                                |
| 12:45-1:00    | BSLO-Based Parameter Calibration of a Smart Battery Model for Digital Twin Readiness                                                                              | Walid Merrouche, Badis Lekouaghet, Mohamed Benghanem                                                          |



## Day 2 — Afternoon Papers (2025-10-29)

Time: 15:00–17:00

Hall 2 — Mixed Track ([Teams Link](#))

**Moderator:** Dr. Bakri Awaji

| Time          | Track                              | Paper Title                                                                                                                             | Authors                                                                           |
|---------------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 15:00 - 15:15 | Emerging Technologies & Trends     | Development of an AI-Powered Personal Financial Management Mobile App with Integrated Chatbot and Gamification                          | Ismail Ahmed Al-Qasem Al-Hadi,, Loh Wei Yang, Abdulalem Ali, Hossny Nabeeh Ghanem |
| 15:15 - 15:30 | Emerging Technologies & Trends     | Development of an AI-Powered VTuber for Interactive Programming Education                                                               | Lawrence Tai Wei Feng, Samar Ghazal, Tarak Nandy, and Ziad Mohamed                |
| 15:30 - 15:45 | Emerging Technologies & Trends     | Gaia Sustain: AI-Enhanced Waste Management for Efficient Recycling and Resource Optimization                                            | Low Zhi Qing, Abdulalem Ali and Yahya Ali Abdelrahman Ali                         |
| 15:45 - 16:00 | AI & ML                            | The Interplay of TAM Constructs and the Insignificant Role of Power Distance in Predicting AI-Driven Adoption in Saudi Higher Education | Tahani Ali Hakami, Yasser Alginahi, and Omar Sabri                                |
| 16:00 - 16:15 | Reliable Systems & Fault Tolerance | AI Driven Cybersecurity: Transforming Enterprise Defense and Risk Management                                                            | Vijay Kumar Butte, Sujata Butte, Sagar Suryakanth                                 |
| 16:15 - 16:30 | Reliable Systems & Fault Tolerance | A Model for Blockchain Adoption in Securing Online Assessments' Integrity in Malaysian Universities                                     | Samir Hammami, bayan.alahmad Abdulaziz Aborujilah, Naaser Tabook, Elham Alalawi   |
| 16:30 – 16:45 | Reliable Systems & Fault Tolerance | Integrated Bond Graph Modeling and MPPT Optimization for Photovoltaic Water Pumping                                                     | Said ALEM, Sofiane BERRAZOUANE                                                    |


**Hall 3 — Mixed (Overflow by Track) ([Teams Link](#))**
**Moderator: Dr. Nasser Al Hadhrami**

| Time          | Track                         | Paper Title                                                                                                                                                                           | Authors                                                             |
|---------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| 15:00 - 15:15 | Green Technology & Healthcare | Brain Tumor Classification Using Kolmogorov-Arnold Networks                                                                                                                           | Samaher Abdullah Aloraini, Mohamed Maher Ben Ismail and Ouïem Bchir |
| 15:15 - 15:30 | Green Technology & Healthcare | Artificial Intelligence in End-of-Life Decisions: Balancing Technology with Ethical Compassion                                                                                        | Marran Al Qwaid                                                     |
| 15:30 - 15:45 | Data Engineering & Analytics  | Utilizing Deep Learning for Accurate Prediction of Company Bankruptcy                                                                                                                 | Zaeem Ahmed, NZ Jhanjhi, Farzeen Ashfaq, Dede Sukmawan              |
| 15:45 - 16:00 | Data Engineering & Analytics  | Multi-Model Fusion Framework for Short-Term Load Forecasting Under Weather-Aware Conditions                                                                                           | Li Kerui and Arafat Al-Dhaqm and Noor Hasrina Bakar                 |
| 16:00 – 16:15 | AI & ML                       | Predicting Student Dropout in Higher Education Using Logistic Regression, Random Forest, and KNN                                                                                      | C. V. Madeshwara, K. Kalaiselvi, Panji Narputro                     |
| 16:15 - 16:30 | Cybersecurity and Privacy     | Cybersecurity Based Unauthorized Network Access Prediction Using a Novel AutoEncoder Algorithm in Comparison with User and Entity Behavior Analytics (UEBA) Algorithm to Improve Loss | Ch. Sai Kumar, N. Deepa, Falentino Sembiring                        |
| 16:30 – 16:45 | Smart Industrial Systems      | An Efficient Hardware Pipelined Convolution Unit for Real-Time Image and Video Processing                                                                                             | Wajdi Elhamzi and Mohamed Atri                                      |