## 4th Kuwait International Conference on Life Sciences (KICLS'2025) Program for Track on Information Science and Artificial Intelligence

| Day 1 - Tuesday November 11, 2025 | | |
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| **SESSION ISAI-IT1** | **Invited Talk:** Cognitive AI: Impacting Healthy Living | Prof. Farhana Zulkernine Queens University, Canada |
| **SESSION ISAI-1** | **Paper Title** | **Authors** |
| 11:15 AM To 12:30 PM | EEG-Based Classification of Induced Tongue Protrusion Using CSP and CNN on Frequency-Band Topographic Features | [1]Sevgi Gökçe Aslan, [2]Bülent Yılmaz [1]Inonu University, Malatya, Türkiye [2]Gulf University for Science and Technology (GUST), Kuwait |
| | Evaluation of Machine Learning Models for Automated Segmentation of SPECT MPI Scans | [1]Ahmad Alenezi, [1]Eman Alawdhi, [2]Ata Jodeiri, [3]Ali Mayya [1]Kuwait University, Kuwait, [2]Tabrez University, Iran [3]Tishreen University, Latikiya, Syria |
| | Robotics in Modern Surgery: Revolutionizing Precision, Efficiency, and Patient Outcomes | Wael Farag Abdullah Al-Salem University |
| | AI-Powered Skin Cancer Detection: From Deep Learning to Dermatological Revolution | Wael Farag Abdullah Al-Salem University |
| | Attention Matters: Residual Occupancy Forecasting in Healthcare under Stress Conditions | [1]Shaikhah Alkhadhr and [2]Haya Alshayji [1]Kuwait University, Kuwait [2]Pennsylvania State University, USA |
| **SESSION ISAI-2** | **Paper Title** | **Authors** |
| 1:30 PM To 2:45 PM | Predictive Modeling of Multi-Class Urban Crime Patterns Using Machine Learning on Spatiotemporal Data | Fatimah Sheikho, Rand Alhassoun, Abd-Elhamid Taha, Nidal Nasser Alfaisal University, KSA |
| | Plugged into the Planet: Measuring IoT Sustainability with Greenscore | Zahraa Marafie and Shaihkah Alkhadhr Kuwait University, Kuwait |
| | AUK Chatbot: An IT-Support AI-Based Virtual Assistant | Ali Roumani, Sayed Ali Altabtabai, Zainab Noorain, Yousef Dallol, Faisal Al-Jenfawi American University of Kuwait, Kuwait |

| | Intelligent Energy Management System for Hydrogen-based Hybrid Vehicles Using AI Control Strategies | Ghaneemah A. Alasfour, Wael A. Farag, and Zakariya Dalala Abdullah Al-Salem University (AASU), Kuwait |
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| | Predicting $CO_2$ Emissions of Geopolymer Concrete Using Machine Learning for Sustainable Construction | [1*]Dinibutun, S., [2]Alshammari, Y., and [1]Catak, N. [1]International University of Science and Technology, Kuwait [2]Kuwait Institute for Scientific Research |
| **SESSION ISAI-3** | **Paper Title** | **Authors** |
| | Assessing the Use of Generative AI in Relational Database Schema Generation | Hanady M Abdulsalam and Ranya Alawadhi Kuwait University |
| | An Assessment of ChatGPT in Performing Software Refactoring | Hanady M. Abdulsalam[1], Ranya Alawadhi[1], Bader A. Ali[1], Aisha A. Alkandari[2], and Jehad Al Dallal[3] [1,2]Kuwait University, Kuwait [3]Gulf University for Science and Technology, Kuwait. |
| | A Software Tool to Analyze and Predict Student Performance via Artificial Intelligence Models | [1]Khajah, M., [2]Abdulsalam, H., [2]Al-Roumi, E., and [1]Al-Shatti, M. [1]Kuwait Institute for Scientific Research, Kuwait [2] Kuwait University, Kuwait |
| **3:00 PM**<br><br>**To**<br><br>**4:30 PM** | Advancing Urban Governance and Smart City Development with Innovative Blockchain - Integrated Civil and Vital Registration System (CVRS) | Lavanya Murugan American International University |
| | Developing a Web-based Application to Assist Decision Makers of Charitable Organizations in the State of Kuwait Phase I: Direct Aid Association | N. Al-Fadhli, M. Al-Shatti, A. Othman, H. Almansouri, H. Alostad Kuwait Institute for Scientific Research (KISR), Kuwait |
| | Sustainable and AI-Driven Digital Transformation of Ethical Review Processes in Higher Education Institutions | [1]Aksu, Muhammed Cagri, and [2]Alan, Alper Turan [1] Artvin Coruh University, Türkiye [2] International University for Science and Technology in Kuwait, Kuwait |
| **Day 2 - Wednesday November 12, 2025** | | |
| **SESSION ISAI-4** | **Paper Title** | **Authors** |
| | The Development of Halal Ingredient Scanner App by Using AI for Enhanced Consumer Trust and Compliance | Nurdeng Deuraseh, Haji Abdul Hafidz bin Haji Omar & Arif Deuraseh, and Amira Deuraseh |

| | | Universiti Islam Sultan Sharif Ali, Brunei Darussalam |
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| **9:00 AM**<br><br>**To**<br><br>**10:15 AM** | Online Topic Drift Analysis of AI Ethics Concerns Across Social Media | Arawa AlTarrah, Maryam AlOtaibi, Loulwah AlSumait Kuwait University |
| | Large Language Model–Mediated Interaction Alignment: A Theory of AI-Driven Second-Language Acquisition | Sami Alenezi International University of Science and Technology, Kuwait |
| | Enabling Factors to Harness the Full Potential of Artificial Intelligence in the Circular Bioeconomy | Munir Shah Agripixels ltd, New Zealand |
| | AI-Driven Personalized Nutrition in the Gulf: A Systematic Review and Conceptual Framework for Culturally Aware Digital Nutrition Interventions | Ali Alfayly and Hanouf Alhammadi Public Authority for Applied Education and Training (PAAET), Kuwait |
| **SESSION ISAI-IT2** | **Invited Talk:**<br>Regulation as Catalyst: A New Blueprint for Sustainable Innovation | Dr. Dari Alhuwail<br><br>CITRA, Kuwait |
| **SESSION ISAI-5** | **Paper Title** | **Authors** |
| **11:15 AM**<br><br>**To**<br><br>**12:30 PM** | A Multi-criteria Based Assessment of Cybersecurity Due Diligence for External Dependencies | Abdullah Yahya Ashkanani Kuwait University |
| | Visualizing SHA-1: Enhancing the Educational Understanding of Cryptographic Algorithms | [1]Hussain Alfayly, [2]Joseph Maguire, and [3]Ali Alfayly [1]University of Glasgow, UK [2]College of Basic Education PAAET, Kuwait |
| | Pulse of the Campus: Real-Time Health Tracking with Bangle.js 2 | [1]Abdelrahman Elshabrawi, [2]Jareen Anjom, [1]Zahraa Marafie, and [1]Shaikhah Alkhadhr [1]Kuwait University, Kuwait [2]North South University, Bangladesh |
| | Tele-education System for Dyscalculic Student Let's Count | Maha Almutairi Kuwait University, Kuwait |
| **SESSION ISAI-6** | **Workshop Title** | **Presenter** |
| **1:30 PM**<br>**To**<br>**2:45 PM** | Research Ethics – Principlism and Beyond | Kassem Saleh Kuwait University |