

## DeSE 2024 Programme at a Glance

<b>DAY 1 – Wednesday, 6<sup>th</sup> November 2024 (University of Sharjah)</b>			
Time (UAE time)	Event		
10:00 - 11:00	Arrival time to the venue		
11:00 – 12:00	Registration, networking and coffee		
12:00- 12:30	Morning session: Welcome Speech, Opening Ceremony & Keynote Speaker 1 (on-site and live broadcast), <b>Al-Bayroni lecture theatre</b> <ul style="list-style-type: none"> <li>- UAE National Anthem and Quran Citation</li> <li>- Welcome Speech from the University of Sharjah, Prof. Hamid M K Al Naimiy (Chancellor – University of Sharjah)</li> <li>- Welcome Speech from the University of Khorfakkan, Prof. Ali H Al Naqbi (Chancellor – University of Khorfakkan)</li> <li>- Welcome Speech from IEEE UAE section, Prof. Hussein Al-Ahmad (IEEE UAE section)</li> <li>- Conference opening, Professor Dhiya Al-Jumeily OBE (DeSE founder and chair)</li> </ul>		
12:30- 13:00	Keynote speech 1: Autonomous Machine Learning: developing neural network models with quantum-inspired evolutionary algorithm, Prof Marley Vellasco (online)		
13:00 -14:00	Lunch Break		
14:00-15:00	Keynote speech 2: Leveraging Remote Sensing and AI for Comprehensive Urban and Environmental Management in Dubai, Prof Hussain Al-Ahmad (on-site/online)		
14:45 – 15:15	Parallel Session 1 (online) <a href="https://meet.google.com/qyt-igga-bzp">https://meet.google.com/qyt-igga-bzp</a> Session Chair: Dr Manar Abu Taleb Session Co-chair: Dr Raouf Farah and Prof Abir Hussain	Parallel Session 2 (online) <a href="https://meet.google.com/mz-f-abzh-vby">https://meet.google.com/mz-f-abzh-vby</a> Session Chair: Dr Venkata Veera Muralee Gopi Chandu Session Co-chair: Muhammad Mubasshir Shaikh	Parallel Session 3 (online) <a href="https://meet.google.com/wks-hhnw-yte">https://meet.google.com/wks-hhnw-yte</a> Session Chair: Dr Aseel Hussein Session Co-chair: Prof Hissam Tawfik and Dr Ayad Turkey
15:15 - 15:30	Coffee Break		
15:30 - 16:30	Parallel Session 4 (on-site) <b>Al-Bayroni lecture theatre</b> Session Chair: Prof Anwar Jarndal Session Co-chair: Dr Khawla Alnajjar	Parallel Session 5 (on-site) <b>M9002</b> Session Chair: Prof Ismail Shahin Session Co-chair: Dr Saeed Abdullah	Parallel Session 6 (on-site) <b>M9005</b> Session Chair: Prof Bashar Afif Issa Session Co-chair: Dr Dilber Uzan Ozahin
16:30-17:00	Social reception and drinks, closure of day 1		
17:00	<b>End of Day 1</b>		
<b>DAY 2 – Thursday, 7<sup>th</sup> November 2024 (University of Khorfakkan)</b>			
11:00 - 12:30	Buses leave to University of Khorfakkan from two pick up points: <ul style="list-style-type: none"> <li>- Sharjah Centro</li> <li>- Round about UO</li> </ul>		
12:30 – 13:00	Welcome Speech and reception from the University of Khorfakkan <b>Al Shohadaa lecture theatre</b>		

13:00 – 13:45	Invited speaker 1: How can we engineer an ocean recovery? The AI, robotics, and sensor needs for marine conservation, Prof Brendan Godley (on-site) <b>Al Shohadaa lecture theatre</b>		
13:45 – 14:30	Keynote speaker 3: Bat Biosonar as a Model for Alternative Approaches to Sonar Sensing, Prof Rolf Mueller (on-site) <b>Al Shohadaa lecture theatre</b>		
14:30 – 15:30	Lunch Break		
15:30 - 17:00	Parallel Session 7 (on-site) <b>Al Shohadaa lecture theatre</b> Session chair: Dr. Henrik Stahl Session cochair: Dr. Roqaya Ismail	Parallel Session 8 (online) <a href="https://meet.google.com/gpj-exjj-und">https://meet.google.com/gpj-exjj-und</a> Session chair: Dr Hiba Alsmadi Session cochair: Dr Walid Rafeh , Dr Nabil Mansour	
	Parallel Session 9 (online) <a href="https://meet.google.com/zeg-dreg-hwk">https://meet.google.com/zeg-dreg-hwk</a> Session chair: Dr Nagwa Zouair Session cochair: Dr Masuda Wardak	Parallel Session 10 (online) <a href="https://meet.google.com/oga-ustj-feh">https://meet.google.com/oga-ustj-feh</a> Session chair: Dr Mustafa Rabbani Session cochair: Dr Muhammad Ali Asadullah	Special Session: Marine Life (on-site) <b>Al Shohadaa lecture theatre</b> Session chair: Dr. Henrik Stahl Session cochair: Dr. Roqaya Ismail
17:00 – 18:30	Cultural trip in the city of Khorfakkan followed by dinner at Al Sahab Skyview		
18:30	End of Day 2		
<b>DAY 3 – Friday, 8<sup>th</sup> November 2024 (DHCC (Dubai Healthcare Centre, Al Razi Complex, Building 64 Block D, Fifth floor, DHCX Hall)</b>			
11:00 – 12:00	Welcome from Dubai Healthcare Centre <b>Hall 1</b>		
12:00 – 13:00	Workshop on AI and data in healthcare (on-site) <b>Hall 1</b>		
13:00-14:00	Lunch break		
14:00 -15:00	Parallel Session 11 (online) <a href="https://meet.google.com/yon-mjqh-edz">https://meet.google.com/yon-mjqh-edz</a> Session chair: Dr Wasiq Khan Session cochair: Miss Mahasin Dimassi	Parallel Session 12 (online) <a href="https://meet.google.com/bvf-zpxj-iip">https://meet.google.com/bvf-zpxj-iip</a> Session chair: Dr Sulaf Assi Session cochair: Mr Saleh Mansour	Parallel Session 13 (online) <a href="https://meet.google.com/mrm-wmsx-dsx">https://meet.google.com/mrm-wmsx-dsx</a> Session chair: Prof Jamila Mustafina Session cochair: Dr Manoj Jayabalan
15:00-16:00	Parallel Session 14 (online) <a href="https://meet.google.com/bxa-efss-ipo">https://meet.google.com/bxa-efss-ipo</a> Session chair: Prof Jamila Mustafina Session cochair: Dr Ala Alkafri	Parallel Session 15 (online) <a href="https://meet.google.com/ttu-fsux-tqo">https://meet.google.com/ttu-fsux-tqo</a> Session chair: Dr Shamaila Iram Session cochair: Dr Nabil Mansour	Parallel Session 16 (online) <a href="https://meet.google.com/xhp-pnzs-nkd">https://meet.google.com/xhp-pnzs-nkd</a> Session chair: Dr Sulaf Assi Session cochair: Dr Thomas Coombs

16:00-16:15	Coffee break		
16:15-17:15	Parallel Session 17 (online) <a href="https://meet.google.com/xar-wojn-ogv">https://meet.google.com/xar-wojn-ogv</a> Session chair: Prof Jamila Mustafina Session cochair: Dr Manoj Jayabalan	Parallel Session 18 (online) <a href="https://meet.google.com/vsw-sidf-nrq">https://meet.google.com/vsw-sidf-nrq</a> Session chair: Dr Shamaila Iram Session cochair: Miss Mahasin Dimassi	Parallel Session 19 (online) <a href="https://meet.google.com/yfi-fgym-jof">https://meet.google.com/yfi-fgym-jof</a> Session chair: Dr Sulaf Assi Session cochair: Mr Saleh Mansour
17:15	End of Day 3 and closure of the conference		

## TECHNICAL PROGRAM-Wednesday, 6<sup>TH</sup> November 2024

**Keynote lecture 1: Autonomous Machine Learning: developing neural network models with quantum-inspired evolutionary algorithm, Professor Marley Vellasco, (Pontifical Catholic University of Rio de Janeiro, Brazil)**

**Keynote lecture 2: Leveraging Remote Sensing and AI for Comprehensive Urban and Environmental Management in Dubai, Prof Hussain Al-Ahmad, (The University of Dubai and IEEE UAE Section).**

### Parallel session 1 (online):

#### e-System Engineering (Main Track)

- ***Intrusion Detection in OT/SCADA Cyber Security and Tabular Generative Adversarial Networks***  
Hillol Biswas (WAPCOS Limited, India); Muthyala Manoj Kumar (Wapcos Limited, India); Pawan Kumar (WAPCOS Limited, India)  
[1571011885]
- ***Assessing AI-Powered Personal Assistant Siri: A Risk Analysis Using ISO/IEC 27005***  
Leen Abugokh (Canadian University Dubai, United Arab Emirates); Minnath Hasheer (Canadian University Dubai, United Arab Emirates); Hamda Ismail (Canadian University Dubai, United Arab Emirates); Gandeve Bayu Satrya (Canadian University Dubai, United Arab Emirates)  
[1571032469]
- ***Design of a Mechatronic Endoskeleton Robot for Inspection Tasks: Model Reference Adaptive Control (MRAC) for Serpentine Locomotion With Stability Analysis***  
Ammar K. Al Mhdawi (De Montfort University, United Kingdom (Great Britain)); Nick Wright (Newcastle University, United Kingdom (Great Britain)); Mohammed I. Younis (Department of Computer Engineering, College of Engineering, University of Baghdad, Iraq); Amjad Humaidi (University of Technology, Iraq)  
[1571044968]
- ***Crack Width Detection for Concrete Structures Using Thermal Images and Artificial Neural Network***  
Anwar Hamdan (Emirates School Establishment, United Arab Emirates); Ahmed Bingamil (University of Sharjah, United Arab Emirates); Sadeque Hamdan (Bangor University, United Kingdom (Great Britain)); Tiago Gualdrapa Soares (Universidade de Lisboa, Portugal); Saleh Abu

### Parallel session 2 (online):

#### e-System Engineering (Main Track)

- ***Speech Enhancement: A Review of Various Approaches, Trends, and Challenges***  
Basheera M. Mahmmod (University of Baghdad & College of Engineering, Iraq); Sadiq H. Abdulhussain (University of Baghdad, Iraq); Taghreed Mohammed Ali (University of Baghdad, Iraq); Muntadher Alsabah (Al-Farahidi University, Iraq); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain))  
[1571066306]
- ***Effective Noise Reduction in Biomedical Speech Signals: A Case Study on Parkinson's Disease***  
Khawla Ahmed Al-Tayeb (University of Sharjah, United Arab Emirates); Hagar Elbatanouny (University of Sharjah, United Arab Emirates); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates)  
[1571066464]
- ***Speech Enhancement Algorithm Using Deep Learning and Hahn Polynomials***  
Ammar Al-Zubaidi (University of Baghdad, Iraq); Riyadh Bassil Abduljabbar (University of Baghdad, Iraq); Basheera M. Mahmmod (University of Baghdad & College of Engineering, Iraq); Sadiq H. Abdulhussain (University of Baghdad, Iraq); Marwah Abdulrazzaq Alkhafaji (University of Baghdad, Iraq); Muntadher Alsabah (Al-Farahidi University, Iraq); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain))  
[1571069835]
- ***Improving Cardiovascular Prediction Performance Using Machine Learning Based Feature Selection***  
Marwah Abdulrazzaq Alkhafaji (University of Baghdad, Iraq); Muntadher Alsabah (Al-Farahidi University, Iraq); Sadiq H. Abdulhussain (University of Baghdad, Iraq);

Dabous (Civil Engineering, United Arab Emirates); Imad Alsyouf (University of Sharjah, United Arab Emirates); Fatma Hosny (University of Sharjah, United Arab Emirates)

[1571046062]

- **Smart Office System: A Review**

Aseel Habeeb Gatea Al-lami (University of Basrah, Iraq); Alaa Al-Ibadi (The University of Basrah, Iraq & University of Salford, United Kingdom (Great Britain)); Musaab Alaziz (University of Basrah & WINLAB, Rutgers University, Iraq)

[1571065450]

Basheera M. Mahmmud (University of Baghdad & College of Engineering, Iraq); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain))

[1571069879]

- **A Cross-Modal Aware Scalable Approach for Fake News Detection**

Nalinika Liyanage (Teesside University Middlesbrough, United Kingdom (Great Britain)); Muhammad Diyan (Teesside University, United Kingdom (Great Britain)); Shatha Rashed Ghareeb (Teesside University, United Kingdom (Great Britain)); Jamila Mustafina (Kazan Federal University, Russia)

[1571071683]

### Parallel session 3 (online): e-System Engineering (Main Track)

- **Computer Vision-Driven AI Techniques for Classification of Animal Species**

Anthony Bacon (Liverpool John Moores University, United Kingdom (Great Britain)); Abbas Saad Alatrany (Liverpool John Moores University & University of Information Technology and Communications, United Kingdom (Great Britain)); Luke Topham (Liverpool John Moores University, United Kingdom (Great Britain)); Hoshang Kolivand (Dep CS LJMU, United Kingdom (Great Britain)); Iftikhar Khan (Liverpool John Moores University, United Kingdom (Great Britain)); Abir J Hussain (Liverpool John Moores University, United Kingdom (Great Britain)); Wasiq Khan (Liverpool John Moores University, United Kingdom (Great Britain))

[1571071835]

- **Artificial Intelligence and Its Role in Optimizing Inventory Management: A Simulation Study**

Cian Dafydd Roberts (Liverpool John Moores University, United Kingdom (Great Britain)); Abbas Saad Alatrany (Liverpool John Moores University & University of Information Technology and Communications, United Kingdom (Great Britain)); Mahmood Alsaadi (Al-Maarif University, United Kingdom (Great Britain)); Hoshang Kolivand (Dep CS LJMU, United Kingdom (Great Britain)); Omar Aldhaibani (Liverpool John Moores University, United Kingdom (Great Britain))

[1571072363]

### Parallel session 4 (on-site): e-System Engineering (Main Track)

- **Leveraging Memetic Algorithm and Machine Learning Methods for Email-Based Spam Detection**

Ayad Turkey (University of Sharjah, United Arab Emirates); Manal Ali Alteneiji (University of Sharjah, United Arab Emirates); Mariam Khalid AlAli (University of Sharjah, United Arab Emirates); Ibrahim Hashem (University of Sharjah, United Arab Emirates); Omar Salah F. Shareef (University of Fallujah, Iraq); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates)

[1571046414]

- **Transformer-Less Grid Voltage Controller Through SCR Switches and a Flexible Pulse Device**

Hussain Attia (American University of Ras Al Khaimah, United Arab Emirates); Mohammad Rabih Aziz (American University of Sharjah, United Arab Emirates)

[1571076974]

- **Advanced Techniques in Channel Estimation, Precoding, and Detection for Massive MIMO Systems in 5G and Beyond**

Khawla Alnajjar (University of Sharjah, United Arab Emirates); Sam Ansari (University of Sharjah, United Arab Emirates); Abdulla Mohammed Alhammadi (University of Sharjah, United Arab Emirates); Ali Abdullatif Almahal (University of Sharjah, United Arab Emirates); Fahim Hafizar Rahman (University of Sharjah, United Arab Emirates); Abdulla Salim Alsuwaidi (University of Sharjah, United Arab Emirates); Khalifa Yousif Alzarooni

- ***Drowsiness Detection System Using Mobile Application Development***  
Mirza Mubashir Baig (Teesside University Middlesbrough, United Kingdom (Great Britain)); Shatha Rashed Ghareeb (Teesside University, United Kingdom (Great Britain)); Muhammad Diyan (Teesside University, United Kingdom (Great Britain)); Jamila Mustafina (Kazan Federal University, Russia) [1571072686]
- ***Online Job Search Application With Automatic Recommendation and Notification System: Leveraging AI and ML for Enhanced User Experience***  
Ebenezer Babalola (Teesside University Middlesbrough, United Kingdom (Great Britain)); Shatha Rashed Ghareeb (Teesside University, United Kingdom (Great Britain)); Jamila Mustafina (Kazan Federal University, Russia) [1571072688]
- ***Agri Sage: A Mobile Application for Agricultural Disease Detection, E-Commerce, and Real-Time Information Systems***  
Talha Aslam (Teesside University Middlesbrough, United Kingdom (Great Britain)); Shatha Rashed Ghareeb (Teesside University, United Kingdom (Great Britain)); Jamila Mustafina (Kazan Federal University, Russia) [1571072692]
- (University of Sharjah, United Arab Emirates); Soliman Mahmoud (University of Sharjah, United Arab Emirates); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates) [1571077003]
- ***Pioneering MIMO Technologies: Enabling the Next Generation of 5G Networks and Beyond***  
Khawla Alnajjar (University of Sharjah, United Arab Emirates); Sam Ansari (University of Sharjah, United Arab Emirates); Yousuf Salem Alhmoudi (University of Sharjah, United Arab Emirates); Rashid Ibrahim (University of Sharjah, United Arab Emirates); Ahmed Abdalla Alblooshi (University of Sharjah, United Arab Emirates); Yousif Bohamad (University of Sharjah, United Arab Emirates); Soliman Mahmoud (University of Sharjah, United Arab Emirates); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates) [1571077197]
- ***Enhancing Wildlife Protection: Poacher Detection Using Machine Learning Models***  
Omar Gad (University of Sharjah, United Arab Emirates); Hagar Elbatanouny (University of Sharjah, United Arab Emirates); Eqab Almajali (University of Sharjah, United Arab Emirates); Jawad Yousaf (Abu Dhabi University, United Arab Emirates); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates) [1571077944]

**Parallel session 5 (online): e-System Engineering (Main Track) & AI and its Applications in Healthcare**

- ***Towards Efficient Diabetic Retinopathy Diagnosis: A Comparative Study of Classification Techniques***  
Khawla Ahmed Al-Tayeb (University of Sharjah, United Arab Emirates); Anwar Hasan Jarndal (United Arab Emirates & University of Sharjah, United Arab Emirates); Talal Bonny (University of Sharjah, United Arab Emirates); Sohaib Majzoub (University of Sharjah, United Arab Emirates); Eqab Almajali (University of Sharjah, United Arab Emirates); Soliman Mahmoud (University of Sharjah, United Arab Emirates) [1571017123]
- ***Effects of Hybrid Contrast Enhancement and Bilateral Filtering for Enhancing***

**Parallel session 6 (on-site): Deep Learning Techniques and Applications & The Impact of Artificial Intelligence on the Future of Higher Education**

- ***Prediction of Asthma Attacks Using ANFIS and Mobile Technologies***  
Kasim M. Al-Aubidy (Tishk International University, Iraq); Aynoor Al-Turk (Philadelphia University, Jordan); Mustafa Awwad Al-khawaldeh (Philadelphia University Jordan, Jordan) [1571048509]
- ***AI and IoT Technologies for Remotely Accessed Laboratories***  
Kasim M. Al-Aubidy (Tishk International University, Iraq) [1571049947]
- ***Efficient Solution for Exam Timetabling Problem: A Case Study of the University of Sharjah***

**Ultrasound Thyroid Cancer Images Classification**

Leena R David (University of Sharjah, United Arab Emirates & Manipal College of Health Professions Manipal Academy of Higher Education, India); Zubaida Sa'id Ameen (Near East University Cyprus, Cyprus); Taha Fouad (University Hospital Sharjah, United Arab Emirates); Dalal Yousef Omar Alnakhalah (University of Sharjah, United Arab Emirates); Sareh Khalvati (University of Sharjah, United Arab Emirates); Safa Zeinal Dastras (University of Sharjah, United Arab Emirates); Wesam Ali Hidar (University of Sharjah, United Arab Emirates); Reem Hassan Mohamed Saleh Alobeidli (University of Sharjah, United Arab Emirates); Mohit Pandey (Goa Medical College, India); Aisha Alshuweihi (University Hospital Sharjah, United Arab Emirates); Abdulmonhem Obaideen (University Hospital Sharjah, United Arab Emirates); Dilber Uzun Ozsahin (University of Sharjah, Sharjah, UAE & Near East University, Nicosia, North Cyprus, United Arab Emirates); Auwalu Saleh Mubarak (Near East University, Cyprus)

[1571067566]

- **Intelligent Sustainable Robot for Efficient Marine Environment Monitoring Using Li-Fi Technology**

Bara Fteiha (Abu Dhabi University, United Arab Emirates); Hala Samer (Abu Dhabi University, United Arab Emirates); Fatima Almazrouei (Abu Dhabi University, United Arab Emirates); Shouq Mohamed (Abu Dhabi University, United Arab Emirates); Sultanah Al-Zubaidi (Abu Dhabi University, United Arab Emirates); Fahid Riaz (Abu Dhabi University, United Arab Emirates); Eqab Almajali (University of Sharjah, United Arab Emirates); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates); Jawad Yousaf (Abu Dhabi University, United Arab Emirates)

[1571078553]

- **A Review of Screening Heart and Lung Diseases Using Auscultation and Artificial Intelligence**

Samah Osama Atayeb (Abu Dhabi University, United Arab Emirates); Leqaa Salah Hassan (Abu Dhabi University, United Arab Emirates); Gena Dahi Abazed (Abu Dhabi University, United Arab Emirates); Mohammed A. Ghazal (Abu Dhabi University, United Arab Emirates); Eqab Almajali (University of Sharjah, United Arab Emirates); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates); Jawad Yousaf (Abu Dhabi University, United

Arab Emirates); Israa Lulu (University of Sharjah, United Arab Emirates); Hind Al-owais (University of Sharjah, United Arab Emirates); Ayad Turkey (University of Sharjah, United Arab Emirates); Saad Harous (University of Sharjah, United Arab Emirates); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates)

[1571052052]

- **Lightweight Hybrid Model Combining MobilNet V2 and PCA for Copy-Move Forgery Detection**

Issam Shallel (University of Anbar, Iraq, Iraq); Lamia Rzouga (University of Sousse, LATIS-Laboratory of Advanced Technology and Intelligent Systems, Tunisia); Najoua Essoukri Ben Amara (University of Sousse & Laboratory of Advanced Technology and Intelligent Systems, Tunisia)

[1571075148]

- **Enhanced Detection of Copy-Move Forgery by Fusing Scores From Handcrafted and Deep Learning-Based Detection Systems**

Issam Shallel (University of Anbar, Iraq, Iraq); Lamia Rzouga (University of Sousse, LATIS-Laboratory of Advanced Technology and Intelligent Systems, Tunisia); Najoua Essoukri Ben Amara (University of Sousse & Laboratory of Advanced Technology and Intelligent Systems, Tunisia)

[1571075161]

- **ANFIS-Based Mathematical Model of Mechanical Ventilator**

Mustafa Awwad Al-khawaldeh (Philadelphia University Jordan, Jordan)

[1571077147]

Arab Emirates); Taimur Hassan (Abu Dhabi University, United Arab Emirates)  
[1571081174]

- **Network-Based Multi-Protocol Attack Detection in Internet-Of-Medical-Things Using Explainable Machine Learning**  
Mohammed M. Alani (Rochester Institute of Technology (RIT-Dubai), United Arab Emirates)  
[1571082964]

- **Quantum Radar: Overview on Technology, Limitations and Opportunities**  
Mariam Alalili (University of Sharjah, United Arab Emirates); Mohammed Bin Ali Maqqavi (University of Sharjah, United Arab Emirates); Qassim MH Nasir (University Of Sharjah, United Arab Emirates); Manar Abu Talib (University of Sharjah, United Arab Emirates)  
[1571085103]

## TECHNICAL PROGRAM-Thursday, 7<sup>TH</sup> November 2024

**Invited speaker: How can we engineer an ocean recovery? The AI, robotics, and sensor needs for marine conservation, Prof Brendan Godley, University of Exeter, Falmouth, UK**

**Keynote lecture 3: Bat Biosonar as a Model for Alternative Approaches to Sonar Sensing, Prof Rolf Mueller, Virginia Tech; Virginia, USA**

### Parallel sessions

#### Parallel session 7 (on-site): e-System Engineering (Main Track)

- **Android Forensics Analysis: Is It Incognito?**  
Issraa Ben Mnaouer (Canadian University Dubai, United Arab Emirates); Ayman Samsudeen (Canadian University Dubai, United Arab Emirates); Moustafa Sherif (Canadian University Dubai, United Arab Emirates); Alanood Alreyashi (Canadian University Dubai, United Arab Emirates); Amina Bashar (Canadian University Dubai, United Arab Emirates); Gandeve Bayu Satrya (Canadian University Dubai, United Arab Emirates)  
[1571031670]
- **Early Stage Kidney Chronic Diseases Diagnosis Using Feature Fusion and Deep Learning Algorithms**  
Tanzila Saba (Prince Sultan University, Saudi Arabia); Muhammad Mujahid (Prince Sultan University, Saudi Arabia); Noor Ayesha (Zhengzhou University Zhengzhou, China); Mahyar Kolivand (School of Medicine, University of Liverpool, United Kingdom (Great Britain))  
[1571032828]

#### Parallel session 8 (online): e-System Engineering (Main Track)

- **Enhancing Machine Learning-Based Model for Early Detection of Diabetes**  
Njideka Linda Dike (Teesside University Middlesbrough, United Kingdom (Great Britain)); Shatha Rashed Ghareeb (Teesside University, United Kingdom (Great Britain)); Jamila Mustafina (Kazan Federal University, Russia)  
[1571072701]
- **Advancements in AI: A Study of English-To-Urdu Dubbing Methods and Applications**  
Mariam Arshad (Teesside University, Middlesbrough, United Kingdom (Great Britain)); Shatha Rashed Ghareeb (Teesside University, United Kingdom (Great Britain)); Jamila Mustafina (Kazan Federal University, Russia)  
[1571072703]
- **A LoRa-Based Communication System for Real-Time Location Tracking and Emergency Signaling in Military Simulation Exercises**  
Omar Aldhaibani (Liverpool John Moores University, United Kingdom (Great Britain)); Ben Hamilton (Liverpool John Moores University,



- **Enhancing Freezing of Gait Prediction in Parkinson's Disease Using Machine Learning and Explainable AI**

Hagar Elbatanouny (University of Sharjah, United Arab Emirates); Natasa Kleanthous (O and P Electronics and Robotics Ltd, Cyprus); Suhaib Salah (University of Sharjah, United Arab Emirates); Soliman Mahmoud (University of Sharjah, United Arab Emirates); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates)

[1571066329]

United Kingdom (Great Britain)); Martin Randles (Liverpool John Moores University, United Kingdom (Great Britain)); Ian Fitzpatrick (Liverpool John Moores University, United Kingdom (Great Britain))

[1571073287]

- **Assisting Airport Security Screening Through YOLO Techniques and Generating Results Using LIME Interpretation**

Ruchen Liu (Teesside University Middlesbrough, United Kingdom (Great Britain)); Shatha Rashed Ghareeb (Teesside University, United Kingdom (Great Britain)); Jamila Mustafina (Kazan Federal University, Russia)

[1571073515]

- **Automated Detection and Classification of Brain Tumors From MRI Images**

Jose Ankitha (Teesside University Middlesbrough, United Kingdom (Great Britain)); Shatha Rashed Ghareeb (Teesside University, United Kingdom (Great Britain)); Muhammad Diyan (Teesside University, United Kingdom (Great Britain)); Jamila Mustafina (Kazan Federal University, Russia)

[1571073536]

- **A Novel Technique of Android Stealth Rooting**

Kashif Kifayat (University of Khor Fakkan, United Arab Emirates); Bilal Ahmed Kamal (Air University, Pakistan); Abdul Basit Shahid (Air University, Pakistan); Syed Muhammad Sajjad (Air University, Pakistan); Khwaja Mansoor (Air University, Pakistan)

[1571074211]

### Parallel session 9 (online): e-System Engineering (Main Track)

- **Reducing Bandwidth and Storage Requirements for Surveillance Videos Using ROI Extraction and Compression**

Maryam H. Fadel (University of Baghdad, Iraq); Ahlam H. Shanin Al-Sudani (University of Baghdad, Iraq); Sadiq H. Abdulhussain (University of Baghdad, Iraq); Basheera M. Mahmmud (University of Baghdad & College of Engineering, Iraq); Muntadher Alsabah (Al-Farahidi University, Iraq); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain))

[1571074793]

- **Artificial Intelligence as a Tool for the Regeneration of Historic City Centers**

Amani Kamal (University of Technology, Iraq); Venus Suleiman Akef (The University of Technology, Iraq)

[1571075419]

- **Using Intelligent Solutions to Improve Logistics Processes**

Irina Makarova (Kazan Federal University, Russia); Aleksey Boyko (Kazan Federal University, Russia); Vadim Mavrin (Kazan Federal University,

### Parallel session 10 (online): e-System Engineering (Main Track)

- **Covid-19 Classification Using Cough Audio - A Comparison of Deep Learning Vs Traditional ML Algorithms**

Sowndarya Venkateswaran (Liverpool John Moores University, United Kingdom (Great Britain)); Nailya Sultanova (Kazan Federal University, Russia)

[1571080447]

- **Identity-Preserved Facial Diversity With Gans and Recognition via Few-Shot Approach**

Swarnava Bhattacharjee (Liverpool John Moores University, United Kingdom (Great Britain)); Nailya Sultanova (Kazan Federal University, Russia)

[1571080450]

- **Design and Development of "Smart Metre Reading" and Monitoring System From Digital Metre Dataset**

Jang Bahadur Singh Umath (Liverpool John Moores University, United Kingdom (Great Britain)); Nailya Sultanova (Kazan Federal University, Russia)

[1571080451]

- **Evaluating Handheld Spectroscopic Techniques and Machine Learning Algorithms**

Jade Bradbury (Liverpool John Moores University, United Kingdom (Great Britain)); Thomas Coombs (Toxicologist, United Kingdom (Great Britain)); Dhiya Al-Jumeily (Liverpool John Moores

- Russia); Jamila Mustafina (Kazan Federal University, Russia) [1571078826]
- **Cryptography Role in Industry 4.0 Through Privacy of Data and Communications Using Hybrid Encryption Algorithms**  
Musadaq Hadi (CERT-IQ, University of Technology, Iraq); Mohammed Abdulredha (University of Baghdad, Iraq); Mustafa M. Baraka (CERT-IQ, Iraq); Ali Hussein Hamdullah (CERT-IQ, Iraq) [1571079446]
  - **Identification of Cosmetics Using Near-Infrared Spectroscopy**  
Jordan Thomas (Bournemouth University, United Kingdom (Great Britain)); Sarah Rowlands (Liverpool John Moores University, United Kingdom (Great Britain)); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain)); Tilak Ginige (Bournemouth University, United Kingdom (Great Britain)); Sulaf Assi (Liverpool John Moores University, United Kingdom (Great Britain)) [1571080039]
  - **Improving e-Commerce With Intelligent Solutions**  
Irina Makarova (Kazan Federal University, Russia); Aleksey Boyko (Kazan Federal University, Russia); Jamila Mustafina (Kazan Federal University, Russia) [1571080427]
  - **Impact of Outliers on Regression and Classification Models: An Empirical Analysis**  
Sam Ansari (University of Sharjah, United Arab Emirates); Ali Bou Nassif (University of Sharjah, United Arab Emirates); Soliman Mahmoud (University of Sharjah, United Arab Emirates); Sohaib Majzoub (University of Sharjah, United Arab Emirates); Eqab Almajali (University of Sharjah, United Arab Emirates); Anwar Hasan Jarndal (United Arab Emirates & University of Sharjah, United Arab Emirates); Talal Bonny (University of Sharjah, United Arab Emirates); Khawla Alnajjar (University of Sharjah, United Arab Emirates); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates) [1571081287]
  - **Utilising Artificial Intelligence to Augment Physiotherapy Education: A Video-Based Analysis and Grading System for Evaluating Student Therapists' Performance**  
Victor Umesiobi (Teesside University, United Kingdom (Great Britain)); Hiba Al Smadi (Teesside University, United Kingdom (Great Britain)); Victor Hammond (Teesside University, United Kingdom (Great Britain)); Gok Kandasamy (Teesside University, United Kingdom (Great Britain)); Ala Al Kafri (Teesside University, United Kingdom (Great Britain)) [1571082377]

### Special session: Marine Life (On-site)

- **Collective Artificial intelligence underwater: distributed autonomous systems for environmental monitoring**, Dr. Guilia De Masi (Khalifa University; Abu Dhabi, UAE)
- **Comprehensive Data Acquisition for Cetacean Monitoring: A Review of Photo-Identification Methods**, Dr. Fatin Mohamed (University of Khorfakkan, Sharjah, UAE)
- **Marine Species Detection Using AI in the Sea of Oman**, Dr. Fouad Lamghari (Fujairah Research Center, Fujairah, UAE)
- **Chlorophyll Dynamics in Relation to Upwelling and Nutrient Availability in the Arabian Gulf and Sea of Oman**, Dr. Kaltham Ismail (University of Khorfakkan, Sharjah, UAE)
- **Thermal Enhancement of PCR using ternary hybrid nanofluids and its effect on fish DNA barcode reads**, Dr. Akbar John (University of Khorfakkan, Sharjah, UAE)
- **Characterization and Bioremediation Potential of Novel Biosurfactant-Producing Bacterial Strains from Oil-Contaminated Seawater in the UAE**, Dr. Roqaya Ismail (University of Khorfakkan, Sharjah, UAE)
- **Monitoring microplastics pollutants in the Arabian Gulf and Gulf of Oman**, Dr. Tarig Ali (University of Khorfakkan, Sharjah, UAE)
- **Advanced Nanomaterials for Water Treatment: Agriculture Sustainability**, Dr. Gomaa Ali (University of Khorfakkan, Sharjah, UAE)

## TECHNICAL PROGRAM-Friday, 8<sup>TH</sup> November 2024

### Workshop on AI and data in healthcare (on-site)

**Prof. Abir Hussain**, University of Sharjah, UAE

**Dr. Mohammed Al-Jumaily**, Al Zahraa Hospital, UAE

### Parallel sessions

#### Parallel session 11 (online): AI applications in Medical Imaging & AI and its Applications in Healthcare

- **Bi-Dimensional Attention-Based SAR Change Detection With SEBlock and MHSA**  
Mohamed Ihmeida (Buckinghamshire New University, United Kingdom (Great Britain)); Muhammad Shahzad (University of Reading, United Kingdom (Great Britain))  
[1571079213]
- **Remote Monitoring of Muscle Activity by Integrating Stacking Ensemble Classifier for Surface Electromyography Signals**  
Alya AlNuaimi (University of Sharjah, United Arab Emirates); Hissam Tawfik (University of Sharjah, United Arab Emirates); Hayssam Dahrouj (King Abdullah University of Science and Technology (KAUST) & Center of Excellence for NEOM Research, Canada); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates)  
[1571080274]
- **Classification of Osteoporosis in Knee X-Rays Using Transfer Learning & Random Forest**  
Wesam Ali Hidar (University of Sharjah, United Arab Emirates); Auwalu Saleh Mubarak (Near East University, Cyprus); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates); Hissam Tawfik (University of Sharjah, United Arab Emirates); Leena R David (University of Sharjah, United Arab Emirates & Manipal College of Health Professions Manipal Academy of Higher Education, India); Dilber Uzun Ozsahin (University of Sharjah, Sharjah, UAE & Near East University, Nicosia, North Cyprus, United Arab Emirates)  
[1571080471]
- **AI-Enabled Diagnosis of Lumbar Spinal Stenosis From Axial MR Images Using Convolutional Neural Network and Image Explainer**  
Uthman O. Oyebarji (SSE Renewables, United Kingdom (Great Britain)); Ala Al Kafri (Teesside University, United Kingdom (Great Britain)); Hiba Al Smadi (Teesside University, United Kingdom (Great Britain)); Mohammad Alkasasbeh (East Lancashire Hospitals NHS Trust, United Kingdom (Great Britain)); Wasiq Khan (Liverpool John Moores University, United Kingdom (Great Britain))  
[1571082392]

#### Parallel session 12 (online): AI and its Applications in Healthcare

- **Using of Near-Infrared Spectroscopy and Machine Learning Algorithms for the Detection of Cardiovascular Diseases and Diabetes Mellitus in Fingernails**  
Megan Wilson (Liverpool John Moores University, United Kingdom (Great Britain)); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain)); Ismail Abbas (Lebanese University, Lebanon); Jason Birkett (Liverpool John Moores University, United Kingdom (Great Britain)); Iftikhar Khan (Liverpool John Moores University, United Kingdom (Great Britain)); Matthew L Harper (Liverpool John Moores University, United Kingdom (Great Britain)); Sulaf Assi (Liverpool John Moores University, United Kingdom (Great Britain))  
[1571043780]
- **Enhancing Comorbidity Diagnosis With Adversarial Ensemble Learning**  
Dhafar Hamed Abd (University of Anbar, Iraq); Dheyauldeen Mukhlif (ENET'Com, Tunisia); Ridha Ejbali (Faculty of Science of Gabes, Tunisia); Adel M. Alimi (REGIM, University of Sfax, National School of Engineers, Tunisia); Mohammed Fadhil Mahdi (AL-Mansour University College, Iraq)  
[1571065913]
- **Adversarial Arabic Fake News Detection Based on Machine Learning**  
Dhafar Hamed Abd (University of Anbar, Iraq); Maysoun Ahmed Abbas (Sfax, Tunisia); Mondher Frikha (University of Sfax, Lebanon); Adel M. Alimi (REGIM, University of Sfax, National School of Engineers, Tunisia); Mohammed Fadhil Mahdi (AL-Mansour University College, Iraq)  
[1571065919]
- **Enhance Cancer Text Classification Using Multi Word Embedding and Ensemble Learning**  
Dhafar Hamed Abd (University of Anbar, Iraq); Mohammed Fadhil Mahdi (AL-Mansour University College, Iraq); Ahmed Subhi Abdalkafor (University of Anbar, Iraq); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates)  
[1571070371]
- **Leveraging the Novel MSHA Model: A Focus on Adrenocortical Carcinoma**  
Mubarak Taiwo Mustapha (Operational Research Center in Healthcare, near East University,

- **Evaluating Few-Shot Prompting Approach Using GPT4 in Comparison to BERT-Variant Language Models in Biomedical Named Entity Recognition**  
Kranthi Kumar Konduru (Liverpool John Moores University, United Kingdom (Great Britain)); Friska Natalia (Universitas Multimedia Nusantara, Indonesia); Sud Sudirman (Liverpool John Moores University, United Kingdom (Great Britain)); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain))  
[1571084415]

Turkey); Efe Precious Precious Onakpojeruo (Operational Research Centre in Healthcare, near East University, Nicosia, Cyprus); Leena R David (University of Sharjah, United Arab Emirates & Manipal College of Health Professions Manipal Academy of Higher Education, India); Berna Uzun (Near East University, Turkey); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates); Dilber Uzun Ozsahin (University of Sharjah, Sharjah, UAE & Near East University, Nicosia, North Cyprus, United Arab Emirates)  
[1571070915]

### Parallel session 13 (online): AI and its Applications in Healthcare

- **Evaluation of Bone Cancer Treatment Techniques**  
Efe Precious Precious Onakpojeruo (Operational Research Centre in Healthcare, near East University, Nicosia, Cyprus); Berna Uzun (Near East University, Turkey); Leena R David (University of Sharjah, United Arab Emirates & Manipal College of Health Professions Manipal Academy of Higher Education, India); Ilker Ozsahin (Near East University, Turkey); Christiana Chioma Efe (College of Education Mosogar, Nigeria); Dilber Uzun Ozsahin (University of Sharjah, Sharjah, UAE & Near East University, Nicosia, North Cyprus, United Arab Emirates)  
[1571071505]
- **Ensemble Predictive Modeling for Dementia Diagnosis**  
Basil Bartholomew Duwa (Operational Research Center in Healthcare, Turkey); Efe Precious Precious Onakpojeruo (Operational Research Centre in Healthcare, near East University, Nicosia, Cyprus); Berna Uzun (Near East University, Turkey); Leena R David (University of Sharjah, United Arab Emirates & Manipal College of Health Professions Manipal Academy of Higher Education, India); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates); Ilker Ozsahin (Near East University, Turkey); Dilber Uzun Ozsahin (University of Sharjah, Sharjah, UAE & Near East University, Nicosia, North Cyprus, United Arab Emirates)  
[1571071634]
- **Deep Learning-Based CT-Scan Image Classification for Accurate Detection of Pancreatic Cancer: A Comparative Study of Different Pre-Trained Models**  
Natacha Usanase (Near East University, Cyprus); Dilber Uzun Ozsahin (University of Sharjah, Sharjah, UAE & Near East University, Nicosia, North Cyprus, United Arab Emirates); Leena R David (University of Sharjah, United Arab Emirates & Manipal College of Health Professions Manipal Academy of Higher Education, India); Ilker Ozsahin (Near East University, Turkey); Abir Jaafar Hussain

### Parallel session 14 (online): AI and its Applications in Healthcare

- **Adversarial Ensemble Learning for Mortality Prediction in Intensive Care Units**  
Dhafar Hamed Abd (University of Anbar, Iraq); Kareem Hameed Khalaf (University of Tabriz, Iran); A. Moallemi Khiavi (University of Tabriz, Iran)  
[1571072736]
- **Selection Techniques in Genetic Algorithm**  
Efe Precious Precious Onakpojeruo (Operational Research Centre in Healthcare, near East University, Nicosia, Cyprus); Berna Uzun (Near East University, Turkey); Leena R David (University of Sharjah, United Arab Emirates & Manipal College of Health Professions Manipal Academy of Higher Education, India); Ilker Ozsahin (Near East University, Turkey); Dilber Uzun Ozsahin (University of Sharjah, Sharjah, UAE & Near East University, Nicosia, North Cyprus, United Arab Emirates)  
[1571072813]
- **Hybridized Paradigms for the Clinical Prediction of Lung Cancer**  
Natacha Usanase (Near East University, Cyprus); Abdullahi Garba Usman (Near East University, Operational Research Centre in Healthcare, Turkey); Dilber Uzun Ozsahin (University of Sharjah, Sharjah, UAE & Near East University, Nicosia, North Cyprus, United Arab Emirates); Leena R David (University of Sharjah, United Arab Emirates & Manipal College of Health Professions Manipal Academy of Higher Education, India); Ilker Ozsahin (Near East University, Turkey); Berna Uzun (Near East University, Turkey); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates)  
[1571072918]
- **Global Life Expectancy Prediction Using Machine Learning Ensemble Techniques**  
Dilber Uzun Ozsahin (University of Sharjah, Sharjah, UAE & Near East University, Nicosia, North Cyprus, United Arab Emirates); Declan Ikechukwu Emegano (Operational Research Center in Healthcare, Turkey); Leena R David (University of Sharjah, United Arab Emirates & Manipal College of Health Professions Manipal Academy of Higher Education, India); Berna Uzun

(University of Sharjah, United Arab Emirates);  
Berna Uzun (Near East University, Turkey)  
[1571072591]

- **Application of Fuzzy PROMETHEE in the Analysis of Childbirth Techniques**  
Natacha Usanase (Near East University, Cyprus); Berna Uzun (Near East University, Turkey); Leena R David (University of Sharjah, United Arab Emirates & Manipal College of Health Professions Manipal Academy of Higher Education, India); Dilber Uzun Ozsahin (University of Sharjah, Sharjah, UAE & Near East University, Nicosia, North Cyprus, United Arab Emirates); Ilker Ozsahin (Near East University, Turkey)  
[1571072617]
- **A Decision-Making Approach in the Clinical Diagnosis and Treatment of Vulva Cancer**  
Natacha Usanase (Near East University, Cyprus); Berna Uzun (Near East University, Turkey); Leena R David (University of Sharjah, United Arab Emirates & Manipal College of Health Professions Manipal Academy of Higher Education, India); Dilber Uzun Ozsahin (University of Sharjah, Sharjah, UAE & Near East University, Nicosia, North Cyprus, United Arab Emirates); Ilker Ozsahin (Near East University, Turkey)  
[1571072622]

#### Parallel session 15 (online): AI and its Applications in Healthcare

- **Evaluating ELISA for Prostate Cancer Detection: A Hybrid PROMETHEE-TOPSIS Approach Using Prostate-Specific Antigen Levels**  
Dilber Uzun Ozsahin (University of Sharjah, Sharjah, UAE & Near East University, Nicosia, North Cyprus, United Arab Emirates); Declan Ikechukwu Emegano (Operational Research Center in Healthcare, Turkey); Leena R David (University of Sharjah, United Arab Emirates & Manipal College of Health Professions Manipal Academy of Higher Education, India); Berna Uzun (Near East University, Turkey); Ilker Ozsahin (Near East University, Turkey)  
[1571074658]
- **Heart Attack Prediction by Integrating Independent Component Analysis With Machine Learning Classifiers**  
Abbas Khalifa Nawar (Imam Alkadhim University College, Iraq); Sabah Abdulazeez Jebur (Imam Alkadhim University College, Iraq); Hasan Abdulrazzaq Jawad (Imam Alkadhim University College, Iraq); Mothefer Majeed Jahefer (Imam Alkadhim University College, Iraq); Lafta Alkhazraji (Imam Jafaar Al-Sadiq University, Iraq); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates)  
[1571075956]

(Near East University, Turkey); Ilker Ozsahin (Near East University, Turkey); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates)  
[1571072965]

- **Machine Learning-Based Predictive Modeling of Mental Health Comorbidities**  
Dilber Uzun Ozsahin (University of Sharjah, Sharjah, UAE & Near East University, Nicosia, North Cyprus, United Arab Emirates); Declan Ikechukwu Emegano (Operational Research Center in Healthcare, Turkey); Leena R David (University of Sharjah, United Arab Emirates & Manipal College of Health Professions Manipal Academy of Higher Education, India); Berna Uzun (Near East University, Turkey); Ilker Ozsahin (Near East University, Turkey); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates)  
[1571072976]

#### Parallel session 16 (online): The Impact of Artificial Intelligence on the Future of Higher Education & Digital Media: Augmented and Virtual Reality

- **Taxonomy and Accurate Survey of Fake Face Recognition System in E-Learning Platforms**  
Bilal Abdulsatar Fadel (University of Anbar, Iraq); Ahmed Subhi Abdalkafor (University of Anbar, Iraq)  
[1571064896]
- **Design and Analysis of Synchronous and Asynchronous Buck Converters in Electrical Applications**  
Yousif Ismail Al Mashhadany (University of Anbar, Iraq); Mustafa Mohammed Kareem (University of Anbar, Iraq)  
[1571073633]
- **Real-Time Services Robot With an Intelligent System Based on a Radio Frequency Identification Unit**  
Yousif Ismail Al Mashhadany (University of Anbar, Iraq); Mohanad Abdulsalam Alaskari (University of Anbar, Iraq)  
[1571075538]
- **Aug-Viz: An Augmented Reality Based Tool to Visualize Human Skeleton for Medical Students of Bangladesh**  
Towfik Ahmed (Liverpool John Moores University, United Kingdom (Great Britain)); Hoshang Kolivand (Dep CS LJMU, United Kingdom (Great Britain));

- Integrating ANFIS, ANN, & MLR With MCDM for Accurate Prediction of Lung Cancer for Improved Clinical Decision Support**  
Efe Precious Precious Onakpojeruo (Operational Research Centre in Healthcare, near East University, Nicosia, Cyprus); Berna Uzun (Near East University, Turkey); Leena R David (University of Sharjah, United Arab Emirates & Manipal College of Health Professions Manipal Academy of Higher Education, India); Ilker Ozsahin (Near East University, Turkey); Christiana Chioma Efe (Near East University, Nicosia, Turkey); Dilber Uzun Ozsahin (University of Sharjah, Sharjah, UAE & Near East University, Nicosia, North Cyprus, United Arab Emirates)

[1571076446]
- QHD-DIC: Quantum-Driven Heart Stroke Detection Using Destructive Interference Clustering**  
Aryaman Paliwal (IIIT Kota, India); Vatsal Adhiya (IIIT Kota, India); Deepanshi Birla (IIIT Kota, India); Hemant Sharma (IIIT Kota, India); Gyan Singh Yadav (IIIT Kota, India)

[1571077769]
- Enhancing ICD-9 Code Prediction With BERT: A Multi-Label Classification Approach Using MIMIC-III Clinical Data**  
Irshad A Buchh (Oracle Corporation & Amazon Web Services, USA)

[1571077988]
- Omar Aldhaibani (Liverpool John Moores University, United Kingdom (Great Britain)); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain))

[1571077952]
- Artificial Intelligence Technologies in Higher Education: Reality and Challenges**  
Sultan T. Abu-Orabi (Tishk International University, Iraq)

[1571081371]
- Integrating Computational Design and Mixed Reality Wearables for Enhanced Distance Learning in Architectural Engineering**  
Aref Maksoud (University of Sharjah, United Arab Emirates); Aseel Hussien (University of Sharjah, United Arab Emirates); Sarah Isam Abdul-Rahman Alawneh (University of Sharjah, United Arab Emirates)

[1571086231]

#### Parallel session 17 (online): Emerging Trends in Data Science Theory and Multidisciplinary Applications

- Flying Najm: Drone-Based System for Accident Reporting**  
Reem Almuhanha (Shaqra University, Saudi Arabia); Nouf Altmami (Shaqra University, Saudi Arabia); Haifa Alduaij (Shaqra University, Saudi Arabia); Maha Alhafy (Shaqra University, Saudi Arabia)

[1571044477]
- Technical Document Query System Using Transformer Model-Based Machine Reading Comprehension**  
Amit Kumar (AU Small Finance Bank Limited, India); Friska Natalia (Universitas Multimedia Nusantara, Indonesia); Sud Sudirman (Liverpool John Moores University, United Kingdom (Great Britain)); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain))

[1571073250]
- Deep Learning Approach for Classifying Date Fruits Using YOLO: A Comparative Analysis**  
Nada Alharbi (Taibah University, Saudi Arabia); Liyakathunisa Syed (Taibah University, Saudi Arabia); Samah Ahmed Taha (Taibah University,

#### Parallel session 18 (online): Deep Learning Techniques and Applications

- Revealing the Unseen: An Insightful Survey on Explainable AI for Deepfake Face Detection**  
Sarah Alotaibi (King Saud University & Riyadh, Saudi Arabia)

[1571041847]
- Stereo Image Super Resolution Reinforced by Non-Local Means Denoising (NLMD) Algorithm**  
Ali Salim Rasheed (University of Information Technology and Communications, Iraq & Research Groups in Intelligent Machines, National Engineering School of Sfax (ENIS), Tunisia); Marwa Jabberi (ISITCom & REsearch Groups in Intelligent Machines, Tunisia); Tarek M. Hamdani (REGIM-Lab.: REsearch Groups in Intelligent Machines, National Engineering School of Sfax (ENIS)., Tunisia); Adel M. Alimi (REGIM, University of Sfax, National School of Engineers, Tunisia)

[1571045907]
- Generative AI and Deep Learning Based Method Detecting Purchasers From Missing Data Social Media**  
Ferial Gammoudi (University of Monastir & MARS Research Laboratory LR17ES05, Tunisia);

Saudi Arabia); Bashayr Alsarrani (Taibah University, Saudi Arabia)

[1571075632]

Mohamed Nazih Omri (University of Sousse, Tunisia)

[1571046451]

- **Enhancing Pedestrian Pose Detection Through YOLO Deep Learning Techniques**  
Reem Sulaiman Alruwaythi (Taibah University, Saudi Arabia); Thekra Abdulaziz Alruwaili (Taibah University, Saudi Arabia); Raud Alsehli (University of Testing, Saudi Arabia); Liyakathunisa Ansari (Taibah University, Saudi Arabia)  
[1571075837]
- **Active Vibration Control of a Smart Structure Using Neural Network**  
Ahmed Abdulrahman Mohammed (King Fahd University of Petroleum and M, Saudi Arabia); Abdulwahid A. Saif (King Fahd University of Petroleum & Minerals, Saudi Arabia); Fouad Al-Sunni (Saudi Arabia); Sami El Ferik (King Fahd University of Petroleum and Minerals, Saudi Arabia)  
[1571052529]
- **Classification of Date Fruits Into Genetic Varieties Using Image Analysis**  
Amani F Aloufi III (Taibah University, Saudi Arabia); Salma Alradadi (Author, Saudi Arabia); Nada Alharbi (Taibah University, Saudi Arabia); Liyakathunisa Syed (Taibah University, Saudi Arabia)  
[1571075906]
- **Improving Fake News Detection With Adversarial Recurrent Neural Network**  
Dhafar Hamed Abd (University of Anbar, Iraq); Maysoon Ahmed Abbas (Sfax, Tunisia); Mondher Frikha (University of Sfax, Lebanon); Adel M. Alimi (REGIM, University of Sfax, National School of Engineers, Tunisia); Mohammed Fadhil Mahdi (Al-Mansour University College, Iraq)  
[1571070705]
- **The Development of Individualized Assignment Generator**  
Andrew V. Danilov (Kazan Federal University, Russia); Rinata Zaripova (Kazan Federal University, Russia); Leila Salekhova (Kazan Federal University, Russia); Timur R. Fazliakhmetov (Kazan Federal University, Russia)  
[1571078134]
- **Role of Deep Learning Models in Intelligent Classification of Various Date Fruit Bunches**  
Shorouk Ramadan (Abu Dhabi University, United Arab Emirates, United Arab Emirates); Zainab Abuowda (Abu Dhabi University, United Arab Emirates); Nour Salam (Abu Dhabi University, United Arab Emirates); Taimur Hassan (Abu Dhabi University, United Arab Emirates); Mohammed A. Ghazal (Abu Dhabi University, United Arab Emirates); Eqab Almajali (University of Sharjah, United Arab Emirates); Abir Jaafar Hussain (University of Sharjah, United Arab Emirates); Jawad Yousaf (Abu Dhabi University, United Arab Emirates)  
[1571078567]

#### Parallel session 19 (online): Deep Learning Techniques and Applications

- **Enhancing AWS DeepRacer Performance: A Study on Reward Functions, Action Spaces, and Hyperparameter Tuning**  
Mayur Madnani (Liverpool John Moores University, United Kingdom (Great Britain))  
[1571080241]
- **Deep Learning Algorithms in Aircraft Detection and Classification: An Analytical Survey**  
Noora Alkharji (University of Sharjah, United Arab Emirates); Hessa Almazrouei (University of Sharjah, United Arab Emirates); Shaikha Alzaabi (University of Sharjah, United Arab Emirates); Ali Bou Nassif (University of Sharjah, United Arab Emirates); Mariame Yasser Elsalhy (University of Sharjah, United Arab Emirates); Manar Abu Talib (University of Sharjah, United Arab Emirates)

[1571084484]

- **Deep Learning-Based Stability Prediction for Electrical Grids: A Data-Driven Approach**

Ali Al-Ataby (University of Liverpool, United Kingdom (Great Britain)); Hussain Attia (American University of Ras Al Khaimah, United Arab Emirates)

[1571086228]

- **Saliency Prediction Model Using an Enhanced Convolutional Neural Network**

Dilip M Nair (Independent Researcher, United Kingdom (Great Britain)); Raghad Alshabandar (Advisory Office for Scientific, Iraq)

[1571087728]

- **Artificial Intelligence and Advanced Technologies for Managing Iraqi Water Resources**

Sulaf Assi (Liverpool John Moores University, United Kingdom (Great Britain)); Wasiq Khan (Liverpool John Moores University, United Kingdom (Great Britain)); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain))

[1571088047]

- **Attitudes and Perceptions Towards the Safety and Efficacy of Commonly Used Cosmetic and Lifestyle Products: Social Media Analysis**

Shoug Muqbel Alshammari (King Faisal University, United Kingdom (Great Britain)); Badriah Eid Alsaif (King Faisal University, Saudi Arabia); Abdullah Al Hamid (King Faisal University, Saudi Arabia)

[1571077363]

- **Machine Learning Techniques Reveal the Most Effective and Influencing Gender-Based Scan Acquisition Parameters That Contribute to Patient Dose Undergoing Enhanced CT Abdomen and Pelvis Examinations**

Entesar Dalah (Dubai Health, United Arab Emirates); Meliz Yuvalı (Near East University, Cyprus); Dilber Uzun Ozsahin (University of Sharjah, Sharjah, UAE & Near East University, Nicosia, North Cyprus, United Arab Emirates)

[1571083318]

- **Comparing Surface-Enhanced Raman Spectroscopy and Raman Microscopy With Machine Learning for the Authentication of Covid-19 Vaccines**

Megan Watson ((Liverpool John Moores University, United Kingdom (Great Britain)); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain)); Jason Birkett (Liverpool John Moores University, United Kingdom (Great Britain)), Iftikhar Khan (Liverpool John Moores University, United Kingdom (Great Britain)); Matthew L Harper (Liverpool John Moores University, United Kingdom (Great Britain)); Sulaf Assi (Liverpool John Moores University, United Kingdom (Great Britain)).

[1571086234]



