

DeSE

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PROGRAMME

16th INTERNATIONAL CONFERENCE
ON
DEVELOPMENTS in eSYSTEMS ENGINEERING

2023

Istanbul, Turkey
18th - 20th December

• ISTANBUL 2023



eSystems Engineering
Society



IEEE

Türkiye Section

Programme at a Glance

DAY 1 - Monday (18 th December 2023)	
Time (Turkey time)	Event
8:30 - 9:00	Registration
9:00 - 10:30	Welcome Speech & Opening Ceremony 2nd floor auditorium - Names to be confirmed.
10:30 – 11:20	Invited Industrial Speech - Artificial Intelligence and Ethics in Medicine - Dr Yasser Abdullah (Barking, Havering and Redbridge University Hospitals NHS Trust, UK) (on-site) 2nd floor auditorium
11:20 -11:35	Coffee Break
11:35 - 12:30	Keynote Speech 1 – Theory Behind Probabilistics - Dr Amer Aladhadh (Iraq Prime Minister's Office, Baghdad, Iraq) (on-site), 2nd floor auditorium
12:30 - 13:30	Lunch Break
13:30 – 14:30	Parallel Session 1 (on-site) 2nd floor auditorium Session Chair: Dr. Khawla Al-Najjar Session Co-chair: Dr. Mohammed Yahaya
	Parallel Session 2 (online) Google Meet/X-lab 3rd floor* Session Chair: Dr Touraj Ehtezazi Session Co-chair: Dr. Athraa H. Hassoon Google Meet joining info Video call link: https://meet.google.com/rfh-zoyd-mkj
14:30 - 14:45	Parallel Session 3 (on-site) 7th floor Meeting Room Session Chair: Dr. Wasiq Khan Session Co-chair: Assist. Prof. Dr. Erdem TEZCAN, Dr. Ahmed Jasim Mohammed
	Parallel Session 4 (online) Google Meet/X-lab 3rd floor* Session Chair: Prof. Jamila Mustafina Session Co-chair: Dr. Lamiaa Fingan Nashi Al-Maliki Google Meet joining info Video call link: https://meet.google.com/dki-obhd-kki
14:45 - 15:45	Coffee Break
14:45 - 15:45	Parallel Session 5 (on-site) 2nd floor auditorium Session Chair: Dr. Sohaib Majzoub Session Co-chair: Assoc. Prof. Dr. Esengül SALTÜRK, Dr. Ali Abdulrahman Khaleel
	Parallel Session 6 (online) Google Meet/X-lab 3rd floor* Session Chair: Dr. Thomas Coombs Session Co-chair: Asst. Prof. Wafaa Abd Al wahed Jaheel Google Meet joining info Video call link: https://meet.google.com/jgg-mpjv-tip
	Parallel Session 7 (on-site) 7th floor Meeting Room Session Chair: Assist. Prof. Dr. Mutlu YILMAZ, Dr. Hoshang Kolivand Session Co-chair: Assist. Prof. Dr. Mutlu YILMAZ, Dr. Zuhair Jaber Mushref
	Parallel Session 8 (online) Google Meet/X-lab 3rd floor* Session Chair: Prof. Jamila Mustafina Session Co-chair: Dr. Ahmed Chyad Ali Google Meet joining info Video call link: https://meet.google.com/oob-hhxn-rur
	End of day 1
	Gala Dinner



* X-lab 3rd floor is for attendees joining on-site. The Google Meet video will be

DAY 2 - Tuesday (19th December 2023)

Time (Turkey time)	Event	
8:00 - 9:00	Registration	
9:00 – 10:00	Keynote Speech 2 – Science, Engineering, Artificial Intelligence and Machine Learning - Prof. Dr. Cagatay Uluisik (ATLAS University, Istanbul, Turkey) (on-site) 2nd floor auditorium	
10:00 – 10:15	Coffee Break	
10:15 - 12:15	Discussion Panel 1 – Artificial Intelligence and the Future of Health Sector- (on-site) 2nd floor auditorium	Parallel Session 26 (online & On-site) 10:15AM TO 11:15AM Google Meet/X-lab 3rd floor* Session Chair: Dr Muhammad Ateeq Session Co-chair: Aris C. Alexoulis Chrysovergis (Manchester Metropolitan University, United Kingdom (Great Britain), and Omid Teimoori (Didactic Services Ltd., United Kingdom (Great Britain)). Google Meet joining info Video call link: https://meet.google.com/tbv-bcgs-nsz
		Parallel Session 9 (online) 10:15AM TO 11:15AM Google Meet/X-lab 3rd floor* Session Chair: Dr Touraj Ehtezazi Session Co-chair: Dr. Ali Majeed Allami Google Meet joining info Video call link: https://meet.google.com/yif-iybn-fdk
		Parallel Session 10 (online) 10:15AM TO 11:15AM 7th floor Meeting Room* Session Chair: Prof Dr Risala Hussein Allami Session Co-chair: Wasaq Jaber Naeem Google Meet joining info Video call link: https://meet.google.com/bxa-kcfi-qqf
12:15 to 13:15	Lunch Break	
13:15 – 14:15	Keynote Speech 3 -The Use of Machine Learning to Sports Science - Professor Yanguo Jing (Leeds Trinity University, Leeds, UK) (online) Zoom/X-lab 3rd floor* Please click the link below to join the webinar: https://us06web.zoom.us/j/85630617232?pwd=KFwwZlZlbnI7qDnu06pvin3hQDFHOalMk2.16NV7piOTrAbPkXZ Passcode: dese2023 Webinar ID: 856 3061 7232 Passcode: 25057276	
14:15-15:15	Parallel Session 11 (online) Google Meet/X-lab 3rd floor* Session Chair: Asst. Prof.Mona Najah Al-Terehi Session Co-chair: Dr. Zuhair Jaber Mushref Google Meet joining info Video call link: https://meet.google.com/xqj-yxxf-yhi	
	Parallel Session 12 (on-site) 2nd floor auditorium Session Chair: Dr. Eqab Almajali Session Co-chair: Dr. Raghad Alshabandar	Parallel Session 13 (online) Google Meet/7th floor Meeting Room* Session Chair: Dr. Venus Suleiman Akef Session Co-chair: Dr. Ahmed Subhi Abdalkafor Google Meet joining info Video call link: https://meet.google.com/hdq-twqn-vbw
15:15 - 15:30	Coffee Break	
15:30 - 16:30	Parallel Session 14 (on-site) 2nd floor auditorium Session Chair: Prof. Abir Hussain Session Co-chair: Assist. Prof. Dr. Mutlu YILMAZ, Dr. Amar Hussain	Parallel Session 15 (online) Google Meet/X-lab 3rd floor* Session Chair: Prof. Dr. Ameer Abdulrahman Hilal Session Co-chair: Dr. Yousif Ismael Mohammed



* X-lab 3rd floor is for attendees joining on-site. The Google Meet video will be

	<p>Parallel Session 16 (online) Google Meet/7th floor Meeting Room*</p> <p>Session Chair: Dr. Venus Suleiman Akef Session Co-chair: Dr. Mahmoud Khaleel Awsaj</p> <p>Google Meet joining info Video call link: https://meet.google.com/qns-qdee-uyy</p>	<p>Google Meet joining info Video call link: https://meet.google.com/hbp-qyaz-mfs</p> <p>Parallel Session 17 (online) Google Meet/X-lab 3rd floor*</p> <p>Session Chair: Dr. Sulaf Assi Session Co-chair: Dr. Mohanad Abdulsalam Younus</p> <p>Google Meet joining info Video call link: https://meet.google.com/xjg-drfn-knc</p>
End of day 2		



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DAY 3 - Wednesday (20th December 2023)

Time (Turkey time)	Event	
9:00 - 9:30	Registration	
9:30 - 12:50	Discussion Panel 2 – Ethical Artificial Intelligence- (on-site) 2nd floor auditorium	Parallel Session 18 (online) – 9:30AM TO 10:30AM Google Meet/X-lab 3rd floor* Session Chair: Prof. Dr. Mafaz Alanezi Session Co-chair: Asso.Prof.Dr. Basim Mahmood Google Meet joining info Video call link: https://meet.google.com/ddw-ngse-zoj
		Parallel Session 19 (online) – 10:40AM TO 11:40AM Google Meet/X-lab 3rd floor* Session Chair: Dr. Ali Amer Ahmed Session Co-chair: Dr. Sadeq Oleiwi Sulaiman Google Meet joining info Video call link: https://meet.google.com/mvc-yizr-wrr
		Parallel Session 20 (online) – 11:50AM TO 12:50AM Google Meet/X-lab 3rd floor* Session Chair: Prof. Jamila Mustafina Session Co-chair: Dr. Sohaib Majzoub Google Meet joining info Video call link: https://meet.google.com/htd-scth-pei
12:50 – 13:50	Lunch Break	
13:50 - 14:50	Parallel Session 21 (online) Google Meet/7th floor Meeting Room* Session Chair: Dr. Raghad Alshabandar Session Co-chair: Dr. Sohaib Majzoub Google Meet joining info Video call link: https://meet.google.com/jmk-dgee-tpv	Parallel Session 22 (online) Google Meet/X-lab 3rd floor* Session Chair: Dr. Walaa Bajnaid Session Co-chair: Dr.Aitizaz Ali Google Meet joining info Video call link: https://meet.google.com/ccs-ehqd-qdn
	Parallel Session 23 (online) Google Meet/7th floor Meeting Room* Session Chair: Dr. Hoshang Kolivand Session Co-chair: Dr. Dhafar Hamed Abd Google Meet joining info Video call link: https://meet.google.com/yxw-waeg-vto	Parallel Session 24 (online) Google Meet/X-lab 3rd floor* Session Chair: Prof Dr Mushtak Talib Salih Nada Al-Ouqaili Session Co-chair: Dr Ahmed J. Aljaaf Google Meet joining info Video call link: https://meet.google.com/wki-pyiw-kwn
	Parallel Session 25 (online) Google Meet/7th floor Meeting Room* Session Chair: Dr Hiba Alsmadi Session Co-chair: Dr Ala Alkafri Google Meet joining info Video call link: https://meet.google.com/oon-qtiv-eiy	Parallel Session 27 (online) Google Meet/X-lab 3rd floor* Session Chair: Prof Kasim Mousa Al-Aubidy, & Prof Mohamed A. Deriche Session Co-chair: Prof Faouzi Derbel Google Meet joining info Video call link: https://meet.google.com/nix-ioik-ofq
14:50-15:00	Coffee Break	
15:00 - 16:00	Parallel Session 28 (online) Google Meet/X-lab 3rd floor* Session Chair: Prof Dr Mushtak Talib Salih Nada Al-Ouqaili Session Co-chair: Dr Ahmed J. Aljaaf	Parallel Session 29 (online) Google Meet/X-lab 3rd floor* Session Chair: Dr. Ahmed Jasim Mohammed Session Co-chair: Dr. Ali Abdulrahman Khaleel



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	<p>Google Meet joining info Video call link: https://meet.google.com/buz-bket-okw</p>	<p>Google Meet joining info Video call link: https://meet.google.com/emh-jror-ube</p>
	<p>Parallel Session 30 (online) Google Meet/X-lab 3rd floor*</p> <p>Session Chair: Dr. Kaustubh V. Sakhare, Session Co-chair: TBC</p> <p>Google Meet joining info Video call link: https://meet.google.com/xbv-ndrb-acb</p>	<p>Parallel Session 31 (online) Google Meet/X-lab 3rd floor*</p> <p>Session Chair: Dr. Ameer Mohammed Khalaf Session Co-chair: Dr. Ahmed Subhi Abdalkafor</p> <p>Google Meet joining info Video call link: https://meet.google.com/qdn-yukn-kzk</p>
16:00 -16:10	Closing of the Conference, award ceremony and DeSE 2023 review	



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DeSE 2023 OPENING CEREMONY

Location: ATLAS University 2nd floor auditorium

Date: 18th of December 2023

Time: 9:00 – 12:30 am

Facilitator: Dr Sulaf Assi

Ceremony opening

- 9:00 – 9:40** Conference opening
- **Prof Dr Engin GÜLAL**, ATLAS University Rector, Istanbul, Türkiye
 - **Prof Dr Ahmed Algaban**, University of Technology, Baghdad, Iraq
 - **Prof Dr Abir Husain**, University of Sharjah, Sharjah, UAE/eSystems Engineering Society, UK
- 9:40 – 10:20** Innovation in Industry 4.0: Education, Engineering, Medicine and the Environment
- **Prof Dr Durmuş Tayyar ŞEN**, Dean of Faculty of Engineering and Natural Sciences, ATLAS University, Istanbul, Türkiye
 - **Dr Oday Ahmed**, Iraqi's Ministry of Higher Education, Iraq
 - **Prof Yaseen Al-Hajjar**, Al-Noor University, Mosul, Iraq
 - **Prof Maitham Ghaly Yousif**, International Society of Health Education, USA
- 10:20 – 11:10** *Keynote speech-* Artificial Intelligence and Ethics in Medicine
- Dr Yasser Abdullah, National Health Service, London, UK
Introduced by: Dr. Mohammed Yahya Al Balwa
- 11:10 – 11:15** *Prize Giving-* ATLAS University, Istanbul, Türkiye
- 11:15 – 11:40** *Coffee break*
- 11:40 – 12:30** *Keynote speech-*Theory behind Probabilistics
- Dr Amer Aladhadh, Iraqi's Prime Minister's Office, Iraq
Introduced by: Prof Dr Durmuş Tayyar ŞEN



TECHNICAL PROGRAM-MONDAY, 18TH DECEMBER 2023

Keynote lecture 1: Artificial Intelligence and Ethics in Medicine,
Dr. Yasser Abdullah (*Barking, Havering and Redbridge University Hospitals NHS Trust, UK*)

Keynote lecture 2: Theory behind probabilistic,
Dr. Amer Aladhadh, (*Iraqi Minister's Office, Baghdad, Iraq*)

Parallel session 1 (on-site): e-System Engineering (Main Track) & Intelligent Engineering Systems and Applied Physics Sciences

- **Efficient FBMC-OQAM Channel Equalization Through Pruned DFT**, Vian Kasim (Al-Rafidain University College, Iraq); Ali N. AlShuwaili (UOITC, USA); Thamer M. Jamel (University of Technology, Iraq) [1570945011]
- **Regression for Forecasting Meat Production Using Milk Data**, Manjunath B Prasad (Liverpool John Moores University & Edward Jones, USA) [1570945475]
- **Design and Implement Services Robot-Based on Intelligent Controller With IoT Techniques**, Mohanad Abdulsalam Alaskari (University of Anbar, Iraq); Yousif Ismail Al Mashhadany (University of Anbar, Iraq) [1570957879]
- **Analysis of High Performance of Separately Excited DC Motor Speed Control Based on Chopper Circuit**, Yousif Ismail Al Mashhadany (University of Anbar, Iraq); Settar S Keream (University of Anbar, Iraq); Ali Ahmed Alrawi (University of Anbar, Iraq, Iraq) [1570959567]
- **Fracture Detection Using A Wideband Wearable Monopole Antenna Based on Microwave Imaging**, Fatima-ezzahra Zerrad (University of Sharjah, United Arab Emirates); Eqab Almajali (University of Sharjah, United Arab Emirates); Mohamed Taouzari (Hassan First University of Settati, Morocco); Abir Hussain (University of Sharjah, United Arab Emirates); Soliman Mahmoud (University of Sharjah, United Arab Emirates) [1570965053]

Parallel session 2 (online): e-System Engineering (Main Track)

- **Advanced Gender Detection Using Deep Learning Algorithms Through Hand X-Ray Images**, Abdullah Ali Jabber (Al-Furat Al-Awsat Technical University & Engineering Technical College Najaf, Iraq); Ali Kareem Abbas (Al-Furat Al-Awsat Technical University & Engineering Technical College-Najaf, Iraq); Zahraa Hashim (Al-Mustaqbal University, Iraq); Rami Qays Malik (Al-Mustaqbal University College, Iraq); Hayder Alghanimi, Hr (Hilla University College & Babylon, Iraq); Ghada Ali Shadeded (Hilla University College, Iraq) [1570938155]
- **Single and Multilevel Offshore Wind Speed Prediction - A Comparison of LSTM, GRU and BiDirectional**, Hillol Biswas (Wapcos Limited, India, India) [1570942943]
- **Evaluate the Image Captioning Technique Using State-Of-The-Art, Attention and Non-Attention Models to Generate Human Like Captions**, Nishant Kumar Verma (Liverpool John Moore University, India); Prakash M. Kene (Associate Professor, India) [1570944336]
- **Identifying Land Features From Satellite Images Using Deep Learning**, Kiran Arakalgudu Nagaraju (NONE, India); Kuldeep Chaurasia (Benett University, India) [1570945725]
- **Potholes Detection Using Optimal Object Detection Model in Real-Time for Different Use Cases**, Imam U Ahamed (Liverpool John Moores University & Banglalink Digital Solutions Ltd., Bangladesh) [1570945781]



Parallel session 3 (on-site): Applied Artificial Intelligence for Industrial Innovation: Current State of the art and New Directions

- ***A Non-Restraining Sheep Activity Detection and Surveillance Using Deep Machine Learning***, Muhammad Yaseen Ayub (COMSATS University Islamabad, Attock Campus, Pakistan); Abir Hussain (University of Sharjah, United Arab Emirates); Muhammad Furqan UI Hassan (University of Hertfordshire, United Kingdom (Great Britain)); Bilal Khan (California State University San Bernardino, USA); Farman Ali Khan (COMSATS University Islamabad, Attock Campus, Pakistan); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain)); Wasiq Khan (Liverpool John Moores University, United Kingdom (Great Britain)) [1570951934]
- ***Stationary Vehicles Detection on Smart Highways and Roads Using Spatio-Temporal Tracking***, Wasiq Khan (Liverpool John Moores University, United Kingdom (Great Britain)); Jessica Kelly (Liverpool John Moores University, United Kingdom (Great Britain)); Ala Al Kafri (Teesside University, United Kingdom (Great Britain)); Natasa Kleanthous (Khalifa University, United Arab Emirates); Umar Khayam (COMSATS University, Pakistan); Bilal Khan (California State University San Bernardino, USA) [1570960624]
- ***Smart Medical Pills Dispenser***, Khawla Alnajjar (University of Sharjah, United Arab Emirates); Abdulaziz Altamimi (University of Sharjah, United Arab Emirates); Khalifa Altamimi (University of Sharjah, United Arab Emirates); Ahmed Alshehhi (University of Sharjah, United Arab Emirates); Sam Ansari (University of Sharjah, United Arab Emirates); Soliman Mahmoud (University of Sharjah, United Arab Emirates); Abir Hussain (University of Sharjah, United Arab Emirates) [1570963397]
- ***Optimizing Power Controller Performance Using Genetic Algorithm: A Step-By-Step Approach for Finding Optimal Values and Improving Control Performance***, Wassan Adnan Hashim (Alqalam University College, Iraq); Jawad Hamad Hameed (Lecture, Iraq); Reem Jafar (Cihan University- Erbil, Iraq); Marwah Al-Obaidi (National Engineering School of Sfax (ENIS), Jordan) [1570966746]

Parallel session 4 (online): Applied Artificial Intelligence for Industrial Innovation: Current State of the art and New Directions

- ***Gas Turbine – CO & NOx Emission Data Analysis With Predictive Modelling Using ML/AI Approaches***, Ankit Singh Dalal (Liverpool John Moores University, United Kingdom (Great Britain)); Nailya Sultanova (Kazan Federal University, Russia); Manoj Jayabalan (Liverpool John Moores University, United Kingdom (Great Britain)); Jamila Mustafina (Kazan Federal University, Russia) [1570973074]
- ***Sentiment Analysis for Assessing Customer Satisfaction in Chatbot Service Encouters***, Seyed Ebrahim Hosseini (Whitecliffe, New Zealand); Shahbaz Pervez (Whitecliffe, New Zealand) [1570976463]
- ***Automation of Financial Capital Supply Chain Optimization Industry Based on Time Series LSTM Algorithm***, Kangyi Li (Ulink College of Shanghai, China); Zhou Yang (Shanghai University, USA) [1570976796]
- ***A Deep Learning Approach for Liver Segmentation and Lesion Detection in Medical Images Using U-Net Segmentation Model***, Kaushik Mahida (California State University San Bernardino, USA); Daniel Jin (Loma Linda University Medical Center, USA); Bilal Khan (California State University San Bernardino, USA); Wasiq Khan (Liverpool John Moores University, United Kingdom (Great Britain)); Khalil Dajani (California State University San Bernardino, USA); Jennifer K Jin (California State University, San Bernardino, USA) [1570951229]
- ***GIS and BIM as Data Sources for Sustainable Heritage Building Retrofit in Basrah City-Iraq***, Ammar Jassim Dakhel (University of Basrah, Iraq); Hamid H Samir (University of Basrah, Iraq) [1570959565]



- **Photogrammetry-Driven HBIM Approach for Mimar Sinan Fine Arts University Campus**, Ridha Farajalah (Mimar Sinan Fine Art University, Turkey); Tigin Töre (Mimar Sinan Fine Arts University, Turkey)

[1570970682]

Parallel session 5 (on-site): Artificial Intelligence for Improving Patient and Medical Safety & Intelligent Engineering Systems and Applied Physics Sciences

- **Using Electrical Impedance Tomography and Machine Learning for Breast Cancer Detection**, Basma Alsaïd (University of Sharjah, United Arab Emirates); Romaissa Berrim (University of Sharjah, United Arab Emirates); Tracy Sarofil (University of Sharjah, United Arab Emirates); Sohaib Majzoub (University of Sharjah, United Arab Emirates); Abir Hussain (University of Sharjah, United Arab Emirates) [1570962248]
- **High Performance of Predict Epileptic Seizures System Based on Machine Learning With IoT**, Ali Ahmed Alrawi (University of Anbar, Iraq, Iraq); Yousif Ismail Al Mashhadany (University of Anbar, Iraq); Settar S Keream (University of Anbar, Iraq) [1570965287]
- **Artificial Neural Network Model for Forecasting Haditha Reservoir Inflow in the West of Iraq**, Othman Abdulhameed (University of Anbar & Upper Euphrates Basin Development Center, Iraq); Sadeq Olewi Sulaiman (University of Anbar & College of Engineering, Iraq); Dhiya Al-Jumeili (Liverpool John Moores University, United Kingdom (Great Britain)) [1570967597]
- **Comorbidity Diseases Diagnosis Using Machine Learning Methods and Chi-Square Feature Selection Technique**, Dheyauldeen Mahmood Mukhlif (OBU, Iraq) [1570968003]
- **Cloud-IoT Application for Scene Understanding in Assisted Living: Unleashing the Potential of Image Captioning and Large Language Model (ChatGPT)**, Deema Abdal Hafeth (University of Lincoln, United Kingdom (Great Britain)); Gokul Lal (University of Lincoln, United Kingdom (Great Britain)); Mohammed Al-khafajiy (University of Lincoln, United Kingdom (Great Britain)); Thar Baker (University of Sharjah, United Arab Emirates); Stefanos Kollias (University of Lincoln/NTUA, United Kingdom (Great Britain)) [1570972064]

Parallel session 6 (online): e-System Engineering (Main Track)

- **Effect of a Novel Flow Field Design on PEM Fuel Cell Performance**, Sadiq T. Bunyan (Mustansiriyah University, Iraq); Hayder Abed Dhahad (UOT, Iraq); Dhamyaa S. Khudhur (Mustansiriyah University, Iraq); Talal Yusaf (Central Queensland University, Australia) [1570947020]
- **Enabling Auto-Heal Micro-Service Framework (AHMF) Based on APM Audit and Proactive Fault Discovery in Cloud Monitoring**, Sarangapani Varadharajan (Liverpool John Moores University, Singapore); Lily M Florence (Adhiyamaan College of Engineering, India) [1570952444]
- **An in Depth Review of Deep Facial Expression Recognition Obstacles, Utilizations, and Prospective Direct**, Raed Ibrahim Khalil, Sr (University of Almustaniriya & University of Ninevah, Iraq); Abbas Hussien Miry (Mustansiriyah University, Iraq); Tariq Mohammed Salman (Mustansiriyah University & College of Engineering, Iraq) [1570955903]
- **Credit Card Fraud Detection Using Machine Learning**, Sanjay Bharadwaj (Liverpool John Moores University, India) [1570958008]
- **Image Recognition Model Integration in Unity and CNN Tester App for Image Recognition**, Simen Nesse Wiik (Norway); Akibul Haque (East West University, Bangladesh) [1570952072]



Parallel session 7 (on-site): Emerging Trends in Data Science Theory and Multidisciplinary Applications)

- **Implementing and Enhancing Monitoring System on the Edge of a Smart Factory: A Case Study With FESTO's Cyber-Physical System**, Omid Teimoori (Didactic Services Ltd., United Kingdom (Great Britain)); Muhammad Ateeq (Xi'an Jiaotong-Liverpool University & University of Liverpool - Honorary Association, China); Aris C. Alexoulis Chrysovergis (Manchester Metropolitan University, United Kingdom (Great Britain))
[1570945075]
- **Using NLP Tools to Improve Pre-Service Teachers' English Skills to Cover the Language Demands of Math CLIL Course**, Andrew V. Danilov (Kazan Federal University & Acme Corporation, Russia); Rinata Zaripova (Kazan Federal University, Russia); Leila Salekhova (Kazan Federal University, Russia); Nailya Batrova (Kazan Federal University & KFU, Russia); Marina Lukoyanova (Kazan Federal University, Russia); Güler Çavuşoğlu (Çanakkale Onsekiz Mart University, Turkey)
[1570945462]
- **Potential Factors on Blockchain Adoption in Malaysian Public Sector Auditing**, Nik Haslina binti Nik Man (Universiti Kebangsaan Malaysia, Malaysia); Dahlia Fernandez (Universiti Kebangsaan Malaysia, Malaysia)
[1570956080]
- **E-Learning Technology Impact on the Development and Sustainability of Training Skills of Anbar University Graduates**, Ahmed Subhi Abdalkafor (University of Anbar, Iraq); Zuhair Jaber Mushref (University of Anbar, Iraq); Ameer Mohammed Khalaf (University Of Anbar, Iraq, Iraq)
[1570961432]
- **A Review of Sign Language Systems**, Marzieh Moradi (Kings Leadership Academy Liverpool, United Kingdom (Great Britain)); Deepika Dhanabalan Kannan (LJMU, United Kingdom (Great Britain)); Shiva Asadianfam (Islamic Azad University & Qom University of Technology, Iran); Omar Aldhaibani (Liverpool John Moores University, United Kingdom (Great Britain)); Hoshang Kolivand (Dep CS LJMU, United Kingdom (Great Britain))
[1570964743]
- **Optimizing Real-Time Decision-Making in Sensor Networks**, Yeşim Yiğitbaşı (Kadir Has University, Turkey); Fabio Stroppa (Sant'Anna - Pisa, Italy); Leonardo Badia (Università degli Studi di Padova, Italy)
[1570976470]

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

- **Architecture Design of B5G and 6G Millimeter-Wave Radio Access Network: Using Wireless Communications to Increase Coverage, Capacity and Performance**, Abdulmajeed Al-Jumaily (Universidad Carlos III de Madrid & Universiti Putra Malaysia UPM, Spain); Saif H. Alrubaei (University of Technology, Iraq); Víctor P. Gil Jiménez (University Carlos III of Madrid, Spain); Ali M. Al-Saegh (Middle Technical University, Iraq); Ahmed A. Mahmood (Universidad Carlos III de Madrid, Spain); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain))
[1570959247]
- **AI System for Aerial Segmentation of Agricultural Farmland and Environmental Landscapes**, Laxmi Sahu (Liverpool John Moores University, India)
[1570959851]
- **Microsimulation Approach for Reducing Gas Emissions of Vehicles at Unsignalized Intersections**, Majid Hameed Hammad (University of Anbar, Iraq); Hameed A. Mohammed (University of Anbar, Iraq)
[1570960091]
- **Unveiling the Reliability of ChatGPT Answers in the Biomedical Realm: An Assessment in the Context of Epilepsy**, Hagar Elbatanouny (MALIHA, United Arab Emirates); Tarek Khater (Sharjah, United Arab Emirates); Sam Ansari (University of Sharjah, United Arab Emirates); Bilal Khan (University of California, USA); Wasiq Khan (Liverpool John Moores University, United Kingdom (Great Britain)); Eqab Almajali (University of Sharjah, United Arab Emirates); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain)); Abir Hussain (University of Sharjah, United Arab Emirates)
[1570960742]
- **Improving the DDoS Protection and A.I. Systems Using Wireshark**, Darshan Deshpande (Liverpool John Moores University, India)
[1570962405]



TECHNICAL PROGRAM-TUESDAY, 19TH DECEMBER 2023

Keynote lecture 1: Science, Engineering, Artificial Intelligence and Machine Learning
Prof. Dr. Cağatay Uluisik, *ATLAS University, Istanbul, Turkey*

Discussion Panel 1: AI and the Future of Health Sector
Engineering and Natural Science Faculty, ATLAS University, Turkey

Keynote lecture 3: The use of machine learning to sports sciences.
Prof. Yanquo Jing, *Leeds Trinity University, Leeds, UK*

Parallel sessions

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

- **Arabic Fake News Detection Using Ensemble Technique**, Dhafar Hamed Abd (University of Anbar, Iraq); Mohammed Fadhil Mahdi (Al-Mansour University College, Iraq); Mustafa Abdalrassual Jassim (Al-Muthanna University & University of Monastir, Iraq); Abir Hussain (University of Sharjah, United Arab Emirates) [1570962730]
- **Machine Learning Algorithms for Human Smoking Behavior Detection Using Speech**, Ibrahim Khudhur Zaal (University of Mosul & College of Computer Science and Mathematics, Iraq); Yusra Faisal Mohammad (University of Mosul, Iraq) [1570964264]
- **Real-Time Masked Face Recognition in the Wild With Few Shots**, Siva Kumar Gunturi (Liverpool John Moores University, India); Mamatha Alugubelly (Upgrad Education Pvt, Ltd., India); Manoj Jayabalan (Liverpool John Moores University, United Kingdom (Great Britain)); Sanchit Aggarwal (Liverpool John Moores University, India) [1570964772]
- **Predicting Themes of Tweets on Earthquakes in Turkey & Syria for Real-Time Classification**, Subhanan Mandal (Liverpool John Moores University, United Kingdom (Great Britain)); Mamatha Alugubelly (Upgrad Education Pvt, Ltd., India); Manoj Jayabalan (Liverpool John Moores University, United Kingdom (Great Britain)) [1570965407]

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

- **Safer Navigation: The AI-Powered Smart Cane for the Visually Impaired**, Abdalla Said Gad (Abu Dhabi University, United Arab Emirates); Bara Fteiha (Abu Dhabi University, United Arab Emirates); Jawaher Alatawi (Abu Dhabi University, United Arab Emirates); Mahra Mohammed (Abu Dhabi University, United Arab Emirates); Mahra Almansoori (Abu Dhabi University, United Arab Emirates); Mohammed A. Ghazal (Abu Dhabi University, United Arab Emirates); Jawad Yousaf (Abu Dhabi University, United Arab Emirates); Eqab Almajali (University of Sharjah, United Arab Emirates); Abir Hussain (University of Sharjah, United Arab Emirates) [1570965613]
- **Develop A Software Engineering System for Models-To Model Based Path Integration Testing**, Sakaina Khalil Izat (University of Mousl, Iraq); Nada Nimat Saleem (University of Mosul & College of Computer Science and Mathematics, Iraq) [1570966669]
- **Research and Implementation of Handwritten Chinese Character Recognition Based on Deep Learning Algorithm**, Zhiying Wang (Teesside University, China); Shatha Rashed Ghareeb (Teesside University, United Kingdom (Great Britain)); Jamila Mustafina (Kazan Federal University, Russia); Zia Ush Shamszaman (Teesside University, United Kingdom (Great Britain)) [1570966698]



- **Light Weight Real-Time Burglary Detection and Inspection in Low Light Surveillance Videos**, Shobhit Bijoor (Liverpool John Moores University, India); Mamatha Alugubelly (Upgrad Education Pvt. Ltd., India); Sanchit Aggarwal (Liverpool John Moores University, India) [1570965475]
- **Enhancing Stock Price Forecasting: Integrating Supply Chain Factors Into LSTM Models and Comparative Performance Analysis**, Minggao Zhou (Teesside University, China); Shatha Rashed Ghareeb (Teesside University, United Kingdom (Great Britain)); Zia Ush Shamszaman (Teesside University, United Kingdom (Great Britain)); Jamila Mustafina (Kazan Federal University, Russia) [1570966699]
- **Utilizing Ensemble Approach for Predictive Customer Clustering Analysis With Unsupervised Cluster Labeling**, Micheal Atunwa (Teesside University, United Kingdom (Great Britain)); Zia Ush Shamszaman (Teesside University, United Kingdom (Great Britain)); Shatha Rashed Ghareeb (Teesside University, United Kingdom (Great Britain)); Jamila Mustafina (Kazan Federal University, Russia) [1570966700]

Parallel session 11 (online): e-System Engineering (Main Track)

- **Job-Matching Chatbots Powered by T5: A Comparative Performance Study With GPT-2**, Saba Soltanmohammadi (Teesside University, United Kingdom (Great Britain)); Zia Ush Shamszaman (Teesside University, United Kingdom (Great Britain)); Shatha Rashed Ghareeb (Teesside University, United Kingdom (Great Britain)); Jamila Mustafina (Kazan Federal University, Russia) [1570966701]
- **Anomaly Detection in Smart Homes Based on Kitchen Activities and Machine Learning**, Sara Ali Alnaqbi (University of Sharjah, United Arab Emirates); Hissam Tawfik (University of Sharjah, United Arab Emirates) [1570968157]
- **Optimizing Spectrum Prediction in Cognitive Radio: Genetic Algorithm-Enhanced Neural Networks and Radial Basis Functions**, Sam Ansari (University of Sharjah, United Arab Emirates); Antanios Kaissar (University of Sharjah, United Arab Emirates); Tarek Khater (Sharjah, United Arab Emirates); Khawla Alnajjar (University of Sharjah, United Arab Emirates); Soliman Mahmoud (University of Sharjah, United Arab Emirates); Abir Hussain (University of Sharjah, United Arab Emirates) [1570969461]
- **Towards a Responsive Security Operations Center for UAVs**, Fadhila Tlili (University of Technology Troyes & University of Sfax, France); Samiha Ayed (Université Technologique de Troyes, France); Lamia Chaari (University of Computer Science and Multimedia of Sfax &

Parallel session 12 (on-site): Deep Learning: Techniques and Applications & Smart Industrial and Biomedical Sciences Systems

- **Performance Evaluation of SISO-OFDM Channel Equalization Utilizing Deep Learning**, Saja S Hanoon (Wasit University, Iraq); Thamer M. Jamel (University of Technology, Iraq); Hasan Khazaal (University of Wasit, Wasit, I, Iraq) [1570947068]
- **Internet of Medical Things (IoMT) for Premature Estimate of Epileptic Seizures**, Ali Ahmed Alrawi (University of Anbar, Iraq, Iraq); Yousif Ismail Al Mashhadany (University of Anbar, Iraq); Sameer Algburi (Al-Kitab University, Iraq) [1570949238]
- **Predicting Medicine Adherence With Precision: An MLP-Based Approach for Personalized Healthcare**, Mahmood K. Awsaj (University of Sfax, Tunisia); Yousif Ismail Al Mashhadany (University of Anbar, Iraq); Lamia Chaari (University of Computer Science and Multimedia of Sfax & Laboratory of Technologies for Smart Systems at Digital Research Center of Sfax (CRNS), Tunisia) [1570964789]
- **Dynamic Heuristic Approach to Enhance the Performance of Few-Shot Meta-Learning**, Amer Mirkhan (Sakarya University, Turkey); Numan Çelebi (Sakarya University, Turkey) [1570965821]



**Parallel session 13 (online): Advanced
Technology, AI, and Historic Preservation)**

- ***The Effect of AI on DNA Sequencing: An Overview of the Process Between History and Present With Ethical Analysis***, Anfal M. Hameed (University of Altinbas, Turkey)
[1570977783]
- ***The Effect of Memory in Shaping Virtual Heritage***, Samaa Jumaa Al Aqbi (University of Technology & Ministry of Youth and Sports, Iraq); Ibrahim AL-Yousif (University of Technology, Iraq); Saad AL-Nuaimi (University of Diyala - Iraq, Iraq)
[1570960621]
- ***Using Laser Scanning Techniques to Study the Visual Identity of Heritage Houses Facades in Erbil City (1900-1930)***, Binyad Maruf Abdulkadir Khaznadar (Salahaddin University-Erbil, Iraq); Salahaddin Y. Baper (Salahaddin University, Iraq)
[1570962275]
- ***Dialogue in Coexistent Formation in the Temporal and Spatial Dimensions / Existing Hospitals, an Applied Case***, Huda Abdullateif Al taie (University of Technology - Architectural Eng. Dept, Iraq); Basim Hasan Hashim Almajidi (University of Technology, Iraq); Ahmed Hashim Hameed El-Eqapy (University of Technology, Iraq)
[1570963250]
- ***Routing Protocol Performance in Vehicular Ad Hoc Networks: An Evaluation***, Hamid Alasadi (IRAQ- BASRA & basra UNIV., Iraq); Hassan Abdulkhaleq Kheder (Okan Üniversitesi, Türkiye, Turkey); Didem Kivanc (University Tuzla Campus 34959 Akfirat-Tuzla / ISTANBUL, Serbia)
[1570965415]

**Parallel session 15 (online): Intelligent
Engineering Systems and Applied Physics
Sciences**

- ***Study of Motion Planning of Quadcopter Under Uncertain Environment***, Khitam Mohammed (Basrah University, Iraq); Alaa Al-Ibadi (The University of Basrah, Iraq & University of Salford, United Kingdom (Great Britain)); Ali Aliedani (University of Basrah, Iraq)
[1570956678]

**Parallel session 14 (on-site): Bio-Inspired
Robotics, Cognitive Computing, and Internet
of Things into real-world applications)**

- ***Grey Wolf Optimizer Algorithm to Detection Fake Profile in Facebook***, Sekkal Nawel (University Abou Bekr Belkaid Tlemcen, Algeria); Mahammed Nadir (ESI Sidi Bel Abbes Algeria, Algeria)
[1570971008]
- ***Towards Secure IoMT: Attack Detecion Using Deep Q-Learning in Heathcare Networks***, Loyal I. Abu Daher (Beirut Arab University, Lebanon); May Itani (Beirut Arab University, Lebanon)
[1570978236]
- ***Towards Reliable V2X Service Using UAV-Aided Coded Content Caching***, May Itani (Beirut Arab University, Lebanon); Loyal I. Abu Daher (Beirut Arab University, Lebanon)
[1570978244]
- ***Task Scheduling in IoT Cloud-Fog Environment Utilising a Hybrid Method and Firefly Algorithm***, Ahmed Abd AL-Kadem Hadi (Al-Mustaqbal University, Iraq); Mjtaba Zuhair Al-Amshawi, Am (College of Imam Alkadhum & Iku, Iraq); Mohammed Al-khafajiy (University of Lincoln, United Kingdom (Great Britain)); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain)); Rusul Almurshedi (Liverpool John Moores University, United Kingdom (Great Britain)); Ahmed J. Aljaaf (Liverpool John Moores University, United Kingdom (Great Britain) & University of Anbar, Iraq)
[1570967532]

**Parallel session 16 (online): Intelligent
Engineering Systems and Applied Physics
Sciences & Advanced Technology, AI, and
Historic Preservation**

- ***High Performance of Smart Refrigerator System Based on IoT Technique***, Hamid R. Alsanad (University of Anbar, Iraq); Yousif Ismail Al Mashhadany (University of Anbar, Iraq); Mohanad Abdulsalam Alaskari (University of Anbar, Iraq); Omar Khaldoun (University of Anbar, Iraq)
[1570965288]



- **Laser-Plasma Ion Acceleration and Its Applications**, Ahmed S. Al-Hiti (University of Anbar, Iraq); Hiba Hassan (University of Technology, Iraq) [1570958844]
- **Efficient Remote Monitoring of SO₂ Emission in Industrial Plants and Laboratories**, Ammar Khamees Ghazzay (University of Anbar & College of Engineering, Iraq); Naser Al-Falahy (University Of Anbar, Iraq) [1570961224]
- **Turbo Coding Performance Improvement With Unbalanced Periodic Bit Insertion**, Mohammed AlMahamdy (University Of Anbar, Iraq); Jeffrey Dill (Ohio University, USA) [1570964565]
- **High-Performance of Mobile Robot Behavior Based on Intelligent System**, Abduljabbar Khudhur Abduljabbar (University of ANBAR, Iraq); Yousif Ismail Al Mashhadany (University of Anbar, Iraq) [1570965277]
- **Enhancing Performance in Vehicular Ad Hoc Networks: The Optimization Algorithm Perspective**, Hamid Alasadi (IRAQ- BASRA & basra UNIV., Iraq); Hanadi Hassan Karim Al-maliki (University of Basrah, Iraq) [1570965499]
- **Enhancement and Design of the Proton Exchange Membrane of Hydrogen Fuel Cell**, Mustafa Almaliki Ali (Babol Noshirvani University of Technology (NIT) & TDMP, Iran); omid Jahanian Jahanian (Babol Noshirvani University of Technology, Iran, Iraq); Qusay Jihad Abdul Ghafoor (University of Technology, Iraq) [1570965874]
- **Artificial Intelligence as a Tool for Creating the Historic City Centers Brand**, Amani Kamal (University of Technology, Iraq); Venus Suleiman Akef (The University of Technology, Iraq) [1570969562]
- **PERSONALIZED EXPERIENCES WITHIN HERITAGE BUILDINGS (Leveraging AI to Boost Visitor Engagement)**, Ghufuran Saadi Saihood (University of Technology- Iraq, Iraq); Ahmed Talib Hameed Haddad (University of Technology - Iraq, Iraq); Firas Eyada (Gensler-Germany, Germany) [1570970455]

Parallel session 17 (online): Artificial Intelligence for Improving Patient and Medical Safety

- **Feature Selection for Binary Dataset Using DragonFly Algorithm**, Zaid Tariq (Informatics Institute for Post Graduate Studies, Iraq) [1570952535]
- **Soft Robot for Ankle Rehabilitation**, Dina Ayad (University of Basrah, Iraq); Alaa Al-Ibadi (The University of Basrah, Iraq & University of Salford, United Kingdom (Great Britain)); Maria Elena Giannaccini (Lecturer in Robotics at the University of Aberdeen, United Kingdom (Great Britain)) [1570954911]
- **Ensemble Model for Prostate Cancer Detection Using MRI Images**, Omar Jawad Kadhim (Modern Uuniversity for Business and Science, Iraq); Ahmed Adil Nafea (University of Anbar, Iraq); Salah A. Aliesawi (University Of Anbar, Iraq); Mohammed M AL-Ani (Universiti Kebangsaan Malaysia, Malaysia) [1570958204]
- **Use of Raman and Fourier Transform Infrared Spectroscopy as a Quality Control of 3D Printed Linalool Fast Dissolving Oral Films**, Molly Thompson (Liverpool John Moores University, United Kingdom (Great Britain)); Sulaf Assi (Liverpool John Moores University, United Kingdom (Great Britain)); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain))



Kingdom (Great Britain)); Alice McCloskey (Liverpool John Moores University, United Kingdom (Great Britain)); Satyajit D Sarker (Liverpool John Moores University, United Kingdom (Great Britain)); Leung Tang (Agilent Technology, United Kingdom (Great Britain)); Fazreelia Mohamed (Liverpool John Moores University, United Kingdom (Great Britain)); Megan Wilson (Liverpool John Moores University, United Kingdom (Great Britain)); Touraj Ehtezazi (Liverpool John Moores University, United Kingdom (Great Britain))

[1570958213]

- **Health Claim Propensity Model Using Machine Learning**, Subhadip Ghosh (Liverpool John Moore University, India)

[1570966030]



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TECHNICAL PROGRAM-WEDNESDAY, 20TH DECEMBER 2023

Discussion Panel 2: Ethical AI

Prof. Abir Hussain, University of Sharjah, UAE

Dr. Hoshang Kolivand, Liverpool John Moores University, UK

Dr. Wasiq Khan, Liverpool John Moores University, UK

Dr. Raghad Alshabandar, University of Anbar, Iraq

Parallel sessions

Parallel session 18 (online): Contemporary Computing as an Effective Approach for Sustainable Development in Industry 4.0

- **Detect and Mitigate Cyberattacks Using SIEM**, Zeyad Safaa Younus (University of Mosul, Iraq); Mafaz Alanezi (University of Mosul, Iraq) [1570959115]
- **Virtual Reality Technology for Digitizing and Sustaining Tangible Historical and Cultural Heritage**, Basim Mahmood (University of Mosul, Iraq & BioComplex Laboratory - Exeter, United Kingdom (Great Britain)); Mafaz Alanezi (University of Mosul, Iraq) [1570959122]
- **An Optimized Byzantine Fault Tolerance Algorithm via MAC for Private Blockchain**, Marah Mohammed Taha, compmer (Al Noor University College & University of Mosul, Iraq); Mafaz Alanezi (University of Mosul, Iraq) [1570959465]
- **Arabic Speech Recognition Based on Self Supervised Learning**, Hiba A Younis (University of Mosul, Iraq); Yusra Faisal Mohammad (University of Mosul, Iraq) [1570960853]
- **Decarbonizing the Aerospace Scope 3 Emissions With Efficient Data Monitoring Framework**, Prathaban Durai (Liverpool John Moores University, United Kingdom (Great Britain)); Jagannath E. Nalavade (Upgrad & MIT Art Design and Technology University Pune, India) [1570965712]

Parallel session 19 (online): Artificial Intelligence for Improving Patient and Medical Safety

- **Explainable AI for Breast Cancer Detection: A LIME-Driven Approach**, Tarek Khater (Sharjah, United Arab Emirates); Abir Hussain (University of Sharjah, United Arab Emirates); Soliman Mahmoud (University of Sharjah, United Arab Emirates); Salwa Yasen (eSystem Engineering Society, United Kingdom (Great Britain)) [1570966633]
- **Using Simulation to Evaluate Parking Space Efficiency**, Irina Makarova (Kazan Federal University, Russia); Alla Krivonogova (Kazan Federal University, Russia); Alexander Voroshilov (Kazan Federal University, Russia); Larisa Fatikhova (Kazan Federal University, Russia); Eduard Tsybunov (Kazan Federal University, Russia); Jamila Mustafina (Kazan Federal University, Russia) [1570967639]
- **Joint Task Offloading and Energy Allocation for UAV-Based Fog Computing Through Federated Deep Reinforcement Learning**, Aqeel Thamer Jawad (University of Diyala & University of Sfax, Tunisia); Rihab Maaloul (University of Sfax, Tunisia); Lamia Chaari (University of Computer Science and Multimedia of Sfax & Laboratory of Technologies for Smart Systems at Digital Research Center of Sfax (CRNS), Tunisia) [1570972445]
- **Identification of Diagnostic Biomarkers for Cardiovascular Diseases and Diabetes Mellitus Through Raman Spectroscopy and Machine Learning Algorithms**, Megan Wilson (Liverpool John Moores University, United Kingdom (Great Britain)); Sulaf Assi (Liverpool John Moores University, United Kingdom (Great Britain)); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain)); Ismail Abbas (Lebanese University, Lebanon); Iftikhar Khan (Liverpool John Moores University, United Kingdom (Great Britain)); Jason Birkett (Liverpool John Moores University, United Kingdom (Great Britain)); Leung Tang



(Agilent Technology, United Kingdom (Great Britain))

[1570974981]

- **New Multipurpose Assistive Technology to Support Physically Disabled Adults**, Matthew Mahmud (Liverpool John Moores University, United Kingdom (Great Britain)); Hoshang Kolivand (Dep CS LJMU, United Kingdom (Great Britain)); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain)); Wasiq Khan (Liverpool John Moores University, United Kingdom (Great Britain))
[1570977818]

Parallel session 20 (online): The implication of Generative AI in Education

- **CNN Hyper-Parameter Optimizer Based on Evolutionary Selection and GOW Approach for Crimes Tweet Detection**, Zainab Khyioon Abd alrdha (Mustansiriyah University, Iraq); Abbas M. Al-Bakry (University of Information Technology and Communications, Iraq); Alaa Kadhim Farhan (University of Technology & Higher Education, Iraq)
[1570965497]
- **Ensemble Learning With Optimum Feature Selection for Tweet Fake News Detection Using the Dragonfly Approach**, Saadi Mohammed Saadi (Iraqi Commission for Computers and Informatics Institute of Postgraduate Studies, Iraq); Waleed Al-Jawher (Uruk University, Iraq)
[1570965848]
- **Applying Dragonfly Algorithm for Feature Selection Optimizing in Machine Learning Classification**, Zaid Tariq (Informatics Institute for Post Graduate Studies, Iraq)
[1570966537]
- **Optimal and Robust Control Design for Educational Magnetic Levitation System**, Musadaq Hadi (University of Technology, Iraq); Hazem Ali (University of Technology, Iraq)
[1570966548]
- **Gene Disease Classification From Biomedical Text via Ensemble Machine Learning**, Rabea Falih Ghazi (Iraqi Computer Authority, Iraq)
[1570966549]

Parallel session 21 (online): The implication of Generative AI in Education

- **Role of AI-Supported Serious Simulation Games in Urban Planning Education**, Mays Ahmed (Iraq); Zuhair Nasar (University of Kufa, Iraq)
[1570970979]
- **A New Multi-Class Classification Method Based on Machine Learning to Document Classification**, Ahmed Hussein Salman (Informatics Institute for Postgraduate Studies, Iraqi Commission for Computers and Informatics, Iraq); Waleed Al-Jawher (Uruk University, Iraq)
[1570970993]
- **A Review of Digital Signal Processing Techniques for Protein-Coding Region Identification in DNA Sequences**, Ammar AbdRaba Sakran (University of Information Technology and Communications, Iraq); Waleed Al-Jawher (Uruk University, Iraq); Suha Mohammed Hadi (Iraqi Commission for Computers and Informatics, Iraq)
[1570971976]
- **The Role of Three-Base Periodicity in Enhancing Exon Detection Through DSP Techniques**, Ammar AbdRaba Sakran (University of Information Technology and Communications, Iraq); Waleed Al-Jawher (Uruk University, Iraq); Suha Mohammed Hadi (Iraqi Commission for Computers and Informatics, Iraq)
[1570976657]
- **A Unified Approach Towards Security Audit and Compliance in Cloud Computing Environment**, Rajesh Yalavaguli Seetharamarao (Liverpool John Moores University - Upgrad & FINTAccX Consultants, India)
[1570964391]



Parallel session 22 (online): Applications of Artificial Intelligence (IA) in Medicine & AI and Media

- **Infographics Generator: A Smart Application for Visual Summarization**, Manoj Nath (Boeing India Private Limited, India); Lakshmi Ethirajan (Boeing India Private Limited, India, India) [1570964262]
- **Alzheimer's Disease Classification Based on Demographic Data and Machine Learning**, Layla Dawood Alwardoud (University of Sharjah, United Arab Emirates); Hissam Tawfik (University of Sharjah, United Arab Emirates); Abir Hussain (University of Sharjah, United Arab Emirates); Soliman Mahmoud (University of Sharjah, United Arab Emirates) [1570968980]
- **Design and Implementation of Web Based Virtual Test System for Coronavirus (COVID-19) Epidemic**, Wasnaa Kadhim (University of Information Technology and Communications, Iraq) [1570969966]
- **Ethical Challenges Associated With Security Vulnerabilities and Data Privacy in Social Networking**, Seyed Ebrahim Hosseini (Whitecliffe, New Zealand); Shahbaz Pervez (Whitecliffe, New Zealand) [1570976246]

Parallel session 23 (online): Emerging Trends in Data Science Theory and Multidisciplinary Applications

- **Effect of Augmented Reality and Virtual Reality in Crime Scene Investigations**, Meshal Albeedan, Mr (University of Liverpool John Moores & None, United Kingdom (Great Britain)); Hoshang Kolivand (Dep CS LJMU, United Kingdom (Great Britain)); Ramy Hammady (University of Essex & Helwan University, United Kingdom (Great Britain)) [1570966538]
- **A Review on Interactive Hands-Free Game Using BCI**, Faris Abuhashish (University of Petra, Jordan); George Sbyrakis (Sbyrakis, United Kingdom (Great Britain)); Hoshang Kolivand (Dep CS LJMU, United Kingdom (Great Britain)); Riyadh Al-Rousan (University of Petra, Jordan); Mansour El Sherief (University of Petra, Jordan) [1570973090]
- **IPv6 Detection Techniques and Solutions**, Mostafa Tajdini (Staffordshire University & School of Computing and Digital Technologies, United Kingdom (Great Britain)); Hoshang Kolivand (Dep CS LJMU, United Kingdom (Great Britain)) [1570973154]
- **Ergonomics Verification of the Machine Operator Activities Using Motion Capture Through Virtual Reality in the Prototyping and Designing Phase**, Filip Rybníkář (University of West Bohemia in Pilsen, Czech Republic); Michal Šimon (University of West Bohemia in Pilsen, Czech Republic); Pavel Vránek (University of West Bohemia in Pilsen, Czech Republic); Matěj Krňoul (University of West Bohemia in Pilsen, Czech Republic) [1570976648]
- **Cheiloplasty Pre-Planning Through Machine Learning: A Conceptual Approach**, Mahyar Kolivand (School of Medicine, University of Liverpool, United Kingdom (Great Britain)); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain)) [1570961375]

Parallel session 24 (online): Emerging Trends in Data Science Theory and Multidisciplinary Applications

- **Brain Stroke Prediction Through Deep Learning Techniques With ADASYN Strategy**, Amjad Rehman (AIDA Lab CCIS Prince Sultan University Riyadh KSA, Saudi Arabia) [1570965567]

Parallel session 25 (online): AI and Intelligent Decision Support System

- **A Study on Data-Driven Energy Forecasting: A Machine Learning Perspective**, Sharath Menon (Liverpool John Moores University, United Kingdom (Great Britain)); Nailya Sultanova (Kazan Federal University, Russia); Manoj Jayabalan (Liverpool John Moores University,



- **Tomato Plant Leaf Disease Classification Using Deep Learning**, Anil R. Ghodekar (Liverpool John Moores University, United Kingdom (Great Britain)); Nailya Sultanova (Kazan Federal University, Russia); Manoj Jayabalan (Liverpool John Moores University, United Kingdom (Great Britain)); Jamila Mustafina (Kazan Federal University, Russia) [1570972427]
- **Privacy Preservation of Clusters With Distance as Sensitivity Measure**, Sowmya Sr (Dayananda Sagar Academy of Technology and Management, India); Manjunath Ss (Academy of Technology and Management, India) [1570974758]
- **Enhancing Arabic Text Classification With a Hybrid Word Embedding Method**, Eman Aljohani (Taibah University, Saudi Arabia) [1570975369]
- **Intelligent Measuring for a Customer Satisfaction Level Inspired by Transformation Language Model**, Abir Hussain (University of Sharjah, United Arab Emirates) [1570976222]
- **Intelligent Measuring for a Customer Satisfaction Level Inspired by Transformation Language Model**, Abir Hussain (University of Sharjah, United Arab Emirates) [1570972416]
- **Deception Detection Deep Learning Comprehensive System Utilizing Explainable AI**, Abir Hussain (University of Sharjah, United Arab Emirates) [1570974270]
- **Polysemy as a Complexity Predictor in School Textbooks**, Andrew V. Danilov (Kazan Federal University & Acme Corporation, Russia); Zilya Nuretdinova (Text Analytics Laboratory, Russia); Zulfat Miftakhutdinov (Kazan Federal University, Russia); Elvira Sharifullina (Kazan Federal University, Russia); Nazym Kydyrbayeva (Al-Farabi Kazakh National University, Kazakhstan); Tatyana Soldatkina (Kazan Federal University, Russia) [1570976578]
- **The Effect of Vulnerability in Facial Biometric Authentication**, Seyed Ebrahim Hosseini (Whitecliffe, New Zealand); Shahbaz Pervez (Whitecliffe, New Zealand) [1570976628]

Parallel session 26 (online & on-site): Emerging, innovative and intelligent Industrial/Internet of Things (IoT)-based smart solutions for various industrial applications. – Note: -Scheduled on Day 2

- **Design of Smart Garden Watering and Lighting Using Arduino**, Hadeel Saeed (Computer Science, Iraq); Nuha Abdulla Hamad (University of Anbar, Iraq); Sumaya Hamad (University of Anbar, Iraq) [1570945768]
- **A Low-Cost Remote Asset Monitoring Solution Through Energy Consumption**, Obiefuna Obidike (Op-tec Systems Ltd, United Kingdom (Great Britain)); Aris C. Alexoulis Chrysovergis (Manchester Metropolitan University, United Kingdom (Great Britain)); Muhammad Ateeq (Xi'an Jiaotong-Liverpool University & University of Liverpool - Honorary Association, China) [1570969288]
- **Image Forgery Detection Using Combined 2D DWT-Neural Network**, Haider Abdulkarim (Dept. of Communication Engineering, University of Technology, Baghdad, Iraq); Marwa K. Farhan (Scholarships and Culture Relationships Directorate, Ministry of Higher Education and Scientific Research, Baghdad, Iraq,

Parallel session 27 (online): Deep Learning: Techniques and Applications

- **Real-Time Emotion Recognition System for Dynamic Real-World Environments**, Mayur Madnani (Liverpool John Moores University, United Kingdom (Great Britain)) [1570961853]
- **Violent Activity Detection on Public Transportation Using Surveillance Footage**, Mandar Kulkarni (Liverpool John Moores University, India) [1570964760]
- **Enhanced Document Classification Using Ensemble Techniques**, Ahmed Hussein Salman (Informatics Institute for Postgraduate Studies, Iraqi Commission for Computers and Informatic, Iraq); Waleed Al-Jawher (Uruk University, Iraq) [1570968392]
- **Improving the CNN Model for Arabic Crime Tweet Detection Based on an Intelligent Dictionary**, Zainab Khyioon Abd alrdha (Mustansiriyah University, Iraq); Abbas M. Al-Bakry (University of Information Technology and Communications, Iraq); Alaa Kadhim Farhan (University of Technology & Higher Education, Iraq)



Iraq); Mustafa Ghanim Rzooki (University of Technology, Iraq)

[1570970248]

- **GANToon - Generative Adversarial Network (GAN) With Dual Discriminators for Cartoonization**, Lakshmi Ethirajan (Liverpool John Moores University & Boeing India Pvt Ltd, India); Jyoti Dabass (IIT Delhi, India) [1570954325]
- **Analyzing Sentiment for Opinion Mining of Large Movie Reviews Using Naive Bayes With Word Frequency**, Mustafa Abdalrassual Jassim (Al-Muthanna University & University of Monastir, Iraq); Dhafar Hamed Abd (University of Anbar, Iraq); Mohamed Nazih Omri (University of Sousse, Tunisia) [1570960982]
- **Improved Simulation-Based Circular Microwave Sensor for Water Quality Assessment**, Omar Alshaltone (University of Sharjah, United Arab Emirates); Eqab Almajali (University of Sharjah, United Arab Emirates); Abir Hussain (University of Sharjah, United Arab Emirates) [1570976864]

Parallel session 28 (online): Advancing Higher Education Research through Industry 4.0, Deep Learning, NLP, and Large Language Models

- **Deep Learning Based Fault Classification and Location for Photovoltaic Systems**, Izziyyah Mazen Alsudi (Al-Balqa Applied University, Jordan); Kasim M. Al-Aubidy (Philadelphia University, Jordan) [1570942820]
- **Outlier for High Dimensional Data A Review**, Wasan AbdAlMajeed Alani (University of Anbar, Iraq); Murtadha Al-Hetee (University of Anbar, Iraq) [1570947075]
- **Detection of Autism Spectrum Disorder by Using Common Machine Learning Algorithms**, Anas D. Sallibi (University of Anbar, Iraq); Khattab M. Ali Alheeti (University of Anbar, Iraq) [1570947598]
- **Perspectives on Industry 4.0 Awareness Among Undergraduate IT Students in IRAQ: University of Anbar as a Case Study**, Ahmed J. Aljaaf (Liverpool John Moores University, United Kingdom (Great Britain) & University of Anbar, Iraq); Mohammed Ibrahim (University of Anbar, Iraq); Mushtak Al-Ouqaili (University of Anbar, Iraq); Dhiya Al-Jumeily (Liverpool John Moores University, United Kingdom (Great Britain)); Jamila Mustafina (Kazan Federal University, Russia); Aysha Al-Rawi (University of Anbar, Iraq); Maha M. Rasheed (University of Anbar, Iraq) [1570948849]
- **Recommender Systems and Machine Learning Techniques for Large Educational Data: A Survey**, Ammar A

Parallel session 29 (online): Advancing Higher Education Research through Industry 4.0, Deep Learning, NLP, and Large Language Models

- **Survey Study of Digital Forensics: Challenges, Applications and Tools**, Abeer D. Salman (University of Anbar & Electronic Computer Center, Iraq); Ekram H Hasan (University of Anbar, Iraq) [1570953188]
- **Comprehensive Study of Side-Channel Analysis (CyberSecurity)**, Zaid M Obaid Obaid (University of Anbar, Iraq); Khattab M. Ali Alheeti (University of Anbar, Iraq) [1570955081]
- **A Review Paper: Security for Supervisory Control and Data Acquisition SCADA Based on DNP3**, Amina A. Alrawi (University of Anbar, Iraq); Khattab M. Ali Alheeti (University of Anbar, Iraq) [1570955630]
- **The Java Starter: An Ontology-Based Tutoring System for Java Beginners**, Miruna I Pirvulescu (King's College London, United Kingdom (Great Britain)); Sahar Al-Sudani (Singapore Institute of Technology, Singapore) [1570958518]
- **Artificial Intelligence Techniques for Adaptive Controlled Air Conditions**, Ahmed Subhi Abdalkafor (University of Anbar, Iraq); Yaseen Saleem Yaseen (University of Anbar, Iraq); Alaa Abdalqahar Jihad (University of Anbar & Computer Center, Iraq) [1570958720]



Mohammed (University of Anbar, Iraq); Murtadha Al-Hetee (University of Anbar, Iraq)
[1570949477]

Parallel session 30 (online): Advancing Higher Education Research through Industry 4.0, Deep Learning, NLP, and Large Language Models

- **A Review on Machine Learning Driven Models for Early Diagnosis of Chronic Kidney Diseases**, Akeel Shaker Mahmoud (University of Anbar, Iraq); Olfa Lamouchi (University of Carthage, Tunisia); Safya Belghith (Ecole Nationale d'Ingénieurs de Tunis, Tunisia)
[1570959293]
- **Model-Driven Engineering for Embedded Systems With Non-Functional Properties Analysis Integration: A Review**, Omar Jawad Kadhim (Modern University for Business and Science, Iraq); Ahmed Adil Nafea (University of Anbar, Iraq); Anas D. Sallibi (University of Anbar, Iraq); Mohammed Kareem (University of Anbar, Iraq)
[1570959479]
- **Anomaly Detection in Wireless Sensor Networks Using Machine Learning: Review**, Hadeel Saleh (University of Anbar, Center for Continuing Education & University of Safax, Tunisia)
[1570960772]
- **Proposed Security System for Cities Based on Animal Recognition Using IOT**, Eman Mahdi (University of Anbar, Iraq); Waleed Kareem (University of Anbar & Iraq, Iraq); Maha M. Rasheed (University of Anbar, Iraq); Amal Turki (University of Anbar, Iraq)
[1570961219]
- **An Effective Hybrid Model for Skin Cancer Detection Using Transfer Learning**, Hussam Jasim Mohammed, H. (University of Anbar, Iraq); Ahmed Adil Nafea (University of Anbar, Iraq); Hussein K. Almulla (University of Anbar, Iraq); Salah A. Aliesawi (University Of Anbar, Iraq); Mohammed M AL-Ani (Universiti Kebangsaan Malaysia, Malaysia)
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Parallel session 31 (online): Advancing Higher Education Research through Industry 4.0, Deep Learning, NLP, and Large Language Models

- **An Automated Approach for Prediction of Half-Maximal Inhibitory Concentration (pIC50) Values, Bioactivity Classes of Acetylcholinesterase Inhibitors and Its Application to Alzheimer's Disease**, Nanda Kumar M R (Liverpool John Moores University, India)
[1570946638]
- **Human Verification System Based on DNA Biometrics**, Hiba Abdulelah (University of Mustansiriyah & Computer Science, Iraq); Mustafa Dhiaa Al-Hassani (Mustansiriyah University, Iraq); Majeed Arsheed (University of Alnahrain, Iraq)
[1570964416]
- **Effective Mutual Authentication Scheme and Message Authentication for Internet of Things (IoT) Using Fog Computing Technology**, Salwan R Hamade (University of Anbar, Iraq); Omar A. Dawood (University Of Anbar, Iraq)
[1570965437]
- **Learning-Based Grey Wolf Optimizer for Job Shop Scheduling Problem**, Ahmed Abdulmunem Hussein (University of Samarra & University of Anbar, Iraq); Esam Yassen (University of Anbar & Center for Artificial Intelligent (CAIT), Universiti Kebangsaan Malaysia, Iraq); Ahmed Noori Rashid (University of Anbar, Iraq)
[1570965481]
- **LLANIME: Large Language Models for Anime Recommendations**, Anjali Agarwal (Liverpool John Moores University, United Kingdom (Great Britain)); Sahil Sharma (Ulster University, India & Northland Road, Londonderry, United Kingdom (Great Britain))
[1570965729]
- **3D-SLAM Implementation on Commercial UAV: Challenges and Future Insights**, Yaman Shullar (KFUPM, Saudi Arabia); Uthman Baroudi (King Fahd University of Petroleum and Minerals, Saudi Arabia)
[1570947475]

