



[Program at a Glance](#)

Day 1: Tuesday, November 17, 2020	
Time	Program
08:45 – 8:50	Welcome from the General Chair Location: Virtual Room
08:50 – 8:55	Welcome from the Program Chairs Location: Virtual Room
09:00 – 11:00	Paper Session S1: Data Science & AI Applications Location: Virtual Room
	Paper Session S2: Security and Privacy Applications Location: Virtual Room
11:15 – 13:15	Tutorial I: Designing Privacy Compliant DLT (Blockchain) Systems Presenter: Dr. Michele Mastroianni, University of Campania Luigi Vanvitelli, Italy Location: Virtual Room
13:15 – 13:45	BREAK
13:45 – 15:45	Paper Session S3: IoT Applications Location: Virtual Room
	Paper Session S4: Deep Learning Models & Techniques Location: Virtual Room
15:50 – 16:50	Poster Session P1 Location: Virtual Room
17:00 – 18:00	Keynote I: Vehicular Cloud Offloading: From Driver Assistance to Safety Critical Applications. Presenter: Prof. Peter Steenkiste, Carnegie Mellon University, USA Location: Virtual Room
18:00 – 19:00	Keynote II: Wireless Communication, Sensing, and Security from Millimeter Wave to Terahertz. Presenter: Prof. Edward Knightly (Rice University) Location: Virtual Room





Day 2: Wednesday, November 18, 2020

Time	Program
08:30 – 10:30	<u>Paper Session S5: Wireless Networks</u> Location: Virtual Room
	<u>Paper Session S6: Data Analytics & Machine Learning</u> Location: Virtual Room
10:35 – 11:55	<u>Tutorial II: Brain-computer interfaces for stroke rehabilitation by RecoveriX</u> Presenter: Dr. Micah Ching, G.tec Neurotechnology, Hong Kong Location: Virtual Room
12:00 – 13:00	<u>Keynote III: Streaming Machine Learning and Innovation</u> Presenter: Simon Elliston-Ball, Cloudera Location: Virtual Room
13:00 – 13:30	BREAK
13:30 – 14:30	<u>Panel Discussion: Industry 4.0 and IoT</u> Panelists: Dr. Mahesh Sooriya bandara, Mr. Ali Cheema, Mr. Antoine Claudepierre, Mr. Anas Majed or Mr. Vikrant Kulkarni Location: Virtual Room
14:45 – 16:15	<u>Paper Session S7: Blockchain & Machine Learning</u> Location: Virtual Room
	<u>Paper Session S8: Big Data Models & Infrastructure</u> Location: Virtual Room
16:30 – 18:00	<u>Paper Session S9: IoT & Security</u> Location: Virtual Room





Technical Program

Day 1: Tuesday, November 17th, 2020

S1: Data Science & AI Applications Session Chair: Dr. Zeyar Aung, Khalifa University Dr. Hanan AlDarmaki, UAEU Time: 9:00 – 11:00 Location: Virtual Room	
<i>CURETO: Skin Diseases Detection Using Image Processing And CNN</i>	R. K. M. S. K Karunanayake; W. G. Malaka Dananjaya; M. S. Y Peiris; B. R. I. S. Gunatileka; Shashika Lokuliyana; Anuththara Kuruppu
<i>Application of Transfer Learning for Fruits and Vegetable Quality Assessment UAE</i>	Sherzod Turaev; Ali Abd Almisreb; Mohammed A. Saleh
<i>Can Dynamic Social Events Impact Our Travel Patterns And Trends? UAE</i>	Feda Qaswal; Imad Afyouni; Zaher Al Aghbari
<i>Query Expansion Framework Leveraging Clinical Diagnosis Information Ontology</i>	Sumbal Malik; Umar Shoaib; Hesham El-Sayed; Manzoor Khan
<i>Smartphone Application for Diagnosing Maize Diseases in Egypt</i>	Nevien Moawad; Abdelrahman Elsayed

[Back to program at a glance](#)





S2: Security and Privacy Applications

Session Chair: Dr. Marton Gergely, UAEU

Dr. Fida Dankar, UAEU

Time: 9:00 – 11:00

Location: [Virtual Room](#)

<i>Framework for Protecting the Confidentiality of Outsourced Data on Cloud</i>	Tasneem Ali Ghunaim; Ibrahim Kamel; Zaher Al Aghbari
<i>Application of Differential Privacy Approach in Healthcare Data - A Case Study</i>	Muhammad Talha Zia; Manzoor Khan; Hesham El-Sayed
<i>A New High Capacity Video Steganography Scheme Using Differential Directional Pixogram</i>	Mohammed Baziyad; Tamer Rabie; Ibrahim Kamel
<i>A Review of Color Image Steganalysis in the Transform Domain</i>	Nour Mohamed; Tamer Rabie; Ibrahim Kamel
<i>Towards Improving the Imperceptibility of Steganography Schemes: Adaptive Scaling Approach</i>	Hassan Vakani; Ibrahim Kamel; Tamer Rabie; Mohammed Baziyad
<i>Studying Data Privacy Management in Small and Medium-Sized IT</i>	Marko Jäntti

Tutorial I: Designing Privacy Compliant DLT (Blockchain) Systems

Presenter: Dr. Michele Mastroianni, University of Campania Luigi Vanvitelli, Italy

Session Chair: Dr. Abdelkader Belkacem, UAEU

Dr. Abderrahmane Lakas, UAEU

Time: 11:15 - 13:15

Location: [Virtual Room](#)

[Back to program at a glance](#)





S3: IoT Applications

Session Chair: Dr. Manzoor Khan, UAEU

Dr. Parag Kulkarni, UAEU

Time: 13:45 – 15:45

Location: [Virtual Room](#)

<i>Mapping gaming elements with gamification categories: Immersion, Achievement, and Social in a MOOC Setting</i>	Rohani Rohan; Debajyoti Pal; Suree Funilkul
<i>Acoustic Localization For Autonomous Unmanned Systems</i>	Murali Manohar S Kumar; Himanshu Yadav; Dawnee Soman; Ashish Kumar; Arun Kumar Reddy N
<i>MarvinEye - Autonomy in Constrained Environment</i>	Aditya Prasanna; Anagha Anil Kumar; Rahul Nagpal
<i>Classification and Scheduling of Information-Centric IoT Applications in Cloud-Fog Computing Architecture (CS_IcloTA)</i>	K J Naik
<i>Information Quality Assessment for the Medical Wearable Devices: Validation Study</i>	Rawhi Alrae; Manar AbuTalib; Qassim MH Nasir
<i>A Manufacturer-Independent Digital Process Platform for Future Construction Sites</i>	Thomas Otte; Hans Aoyang Zhou; Aymen Gannouni; Jonas Odenthal; Anas Abdelrazeq; Frank Hees

[Back to program at a glance](#)





S4: Deep Learning Models & Techniques

Session Chair: Dr. Salah Bouktif, UAEU

Dr. Aamna Mohammed Al-Shehhi, Khalifa University

Time: 13:45 – 15:45

Location: [Virtual Room](#)

<i>Variational autoencoder as a generative tool to produce de-novo lead compounds for biological targets</i>	Varun Ullanat
<i>Deep Learning Techniques for Automatic Modulation Classification: A Systematic Literature Review</i>	Sara Ghunaim; Qassim MH Nasir; Manar Abu Talib
<i>A survey of Arabic Image captioning using deep learning models</i>	Anfal Attai; Ashraf Elnagar
<i>Deep Learning Model For Financial Time Series Prediction</i>	Omnia Mohamed Kelany; Sherin F Aly; Mohamed Ismail
<i>Self-supervised Deep Learning for Flower Image Segmentation</i>	Sudipan Saha; Nasrullah Sheikh; Biplab Banerjee; Sumedh Pendurkar

P1: Poster Session

Session Chair: Dr. Sofia Ouhbi, UAEU

Dr. Mamoun Awad, UAEU

Time: 15:50 – 16:50

Location: [Virtual Room](#)

<i>Hiding Secret Data in Human Genes: A Steganographic Approach</i>	Imad El Hanouti; Fatima-Ezzahrae Amhal; Hakim El Fadili
<i>Mobile application for visually impaired people</i>	Sađžida Halvadžić; Lejla Kovac; Ali Abd Al misreb
<i>P300-based Brain Computer Interface Control and Protection for Augmentative Military Applications</i>	Ays ha Helal Aleissae; Alanoud Alshamsi; Meera Alnuaimi; Ays ha Alderei
<i>Combining Eye-gaze Input with Brain-computer Interface for Precise Cooperative Rifle Shooting</i>	Mohammed Mubarak Al-Shamsi
<i>A Keras Sequential-based GUI Images Classifier</i>	Abdullah Fatota; Ali Abd Al misreb

[Back to program at a glance](#)





14th International Conference on Innovations in Information Technology (IEEE IIT'20)
November 17-18, 2020, Al Ain, UAE



Keynote I: Vehicular Cloud Offloading: From Driver Assistance to Safety Critical Applications.
Presenter: Prof. Peter Steenkiste, Carnegie Mellon University, USA
Session Chair: Prof. Taieb Znati, UAEU
Time: 17:00 - 18:00
Location: [Virtual Room](#)

Keynote II: Wireless Communication, Sensing, and Security from Millimeter Wave to Terahertz.
Presenter: Prof. Edward Knightly, Rice University, USA
Session Chair: Prof. Taieb Znati, UAEU
Time: 18:00 - 19:00
Location: [Virtual Room](#)

[Back to program at a glance](#)





Day 2: Wednesday, November 18th, 2018

S5: Wireless Networks

Session Chair: Dr. Saad Harous, UAEU

Dr. Manzoor Khan, UAEU

Time: 9:00 – 10:30

Location: [Virtual Room](#)

<i>Efficient Base-Centric/User-Centric Clustering Algorithms Based on Thresholding and Sorting</i>	Shahriar Shirvani Moghaddam; Kiaksar Shirvani Moghaddam
<i>Enhanced Coordinated Multi Point Scheduling in LTE-Advanced Systems</i>	Mohammed I Aal-Nouman; Noor Qusay A. AlShaikhli; Sarmad M. Hadi
<i>M-BEB: Enhanced and Fair Binary Exponential Backoff</i>	Zerguine Nadia; Zibouda Aliouat; Mohammed Mostefai; Saad Harous
<i>Performance Improvement of Energy Detection in Cognitive Radio Under Noise Uncertainty</i>	Morteza Alijani; Anas Osman

S6: Data Analytics & Machine Learning

Session Chair: Dr. Munkhjargal Gochoo, UAEU

Dr. Mohammad Masud, UAEU

Time: 8:30 – 10:30

Location: [Virtual Room](#)

<i>Dynamic Reference Information: Formalising Contextual Actionable Information for Contested Environment</i>	Angela Consoli; Andrew Walters
<i>Citizen Engagement in Smart Government: Content Analysis of Mohammed Bin Rashid Tweets</i>	Aysha Al Sawafi; Mamoun Awad
<i>A Survey of Emergency Service Facilities Site Selection (ESFSS) Algorithms</i>	Mariam Hassan AlThabahi; Manar Abu Talib; Sohail Abbas; Essa Basaeed
<i>Extended Speech Rhythm-Based Analysis of Saudi Dialects Using SAAVB Corpus</i>	Rana Fahad Bin Ikrish; Yousef A Alotaibi; Soha B. Sandouka
<i>Aspect-Based Sentiment Analysis of Arabic Tweets in the Education Sector Using a Hybrid Feature Selection Method</i>	Manar Alassaf; Ali Qamar

[Back to program at a glance](#)





Tutorial II: Brain-computer interfaces for stroke rehabilitation by RecoveriX
Presenter: Dr. Micah Ching, G.tec Neurotechnology, Hong Kong
Session Chair: Dr. Abdelkader Belkacem, UAEU
Dr. Abderrahmane Lakas, UAEU
Time: 10:35 - 11:55
Location: [Virtual Room](#)

Keynote III: Streaming Machine Learning and Innovation
Presenter: Mr. Simon Elliston-Ball, Cloudera
Session Chair: Dr. Hesham ElSayed, UAEU
Dr. Parag Kulkarni, UAEU
Time: 12:00 - 13:00
Location: [Virtual Room](#)

Panel Discussion: Industry 4.0 and IoT
Panelists:
- Dr. Mahesh Sooriyabandara
- Mr. Ali Cheema
- Mr. Antoine Claudepierre
- Mr. Anas Majed or Mr. Vikrant Kulkarni
Moderator: Dr. Manzoor Khan, UAEU
Co-host: Dr. Parag Kulkarni, UAEU
Time: 13:30 - 14:30
Location: [Virtual Room](#)

[Back to program at a glance](#)





S7: Blockchain & Machine Learning Session Chair: Dr. Khaled Shuaib, UAEU Dr. Ezedin Barka, UAEU Time: 14:45 – 16:15 Location: Virtual Room	
<i>Empirical analysis of generalization through augmentation for classifying images of vernacular handwritten texts</i>	Rajneesh Tiwari; Aritra Sen; Arindam Banerjee; Kaushik Dey
<i>A Blockchain Technology Approach for the Security and Trust in Trade Finance</i>	Neha Jain
<i>Intrusion Detection and Attack classification Leveraging Machine Learning Technique</i>	Shahtaj Shaukat; Arshid Ali; Amreen Batool; Fehaid Alqahtani; Jan Sher Khan; Arshad Arshad; Jawad Ahmad
<i>Botnet Attack Detection Using Machine Learning</i>	Mustafa Alshamkhany; Wisam Alshamkhany; Mohamed Mansour; Mueez Khan; Salam Dhou; Fadi Aloul

S8: Big Data Models & Infrastructure Session Chair: Dr. Hany Al Ashwal, UAEU Dr. Zeyar Aung, Khalifa University Time: 14:45 – 16:15 Location: Virtual Room	
<i>AdaDiffGrad: An Adaptive Batch Size Implementation Technique for DiffGrad Optimization Method</i>	Wajid Khan; Usman Shahid Khan; Mazhar Ali; Sara Ali; Muhammad Jawad; Raheel Nawaz
<i>Application of Containerized Microservice - Approach to Airline Sentiment Analysis</i>	Sumbal Malik; Hesham El-Sayed Manzoor Khan; Henry Alexander
<i>Web-based multi-user concurrent job scheduling system on the shared computing resource objects</i>	Tetiana Habuza; Khaled Khalil; Nazar Zaki; Fady Alnajjar; Munkhjargal Gochoo
<i>Towards General Purpose Object Detection: Deep Dense Grid Based Object Detection</i>	Solomon Negussie Tesema; El-Bay Bourenane

[Back to program at a glance](#)





S9: IoT & Security

Session Chair: Dr. Farag Sallabi, UAEU

Dr. Zouheir Trabelsi, UAEU

Time: 16:30 – 18:00

Location: [Virtual Room](#)

<i>Coverage Optimisation for Aerial Wireless Networks</i>	Shadi Eltanani; Ibrahim Ghafir
<i>IoT applications for monitoring companion animals: A systematic literature review</i>	Roberto Lima, Jr.
<i>API Security Risk Assessment Based on Dynamic ML Models</i>	Bojan Nokovic; Nebojsa Djosic; Weiyue Li
<i>OEI2FA: Zero Effort Indoor Two Factor Authentication</i>	Ali Abdullah S. AlQahtani; Hosam Alamleh; Jean Gourd; Hatwib Mugasa

[Back to program at a glance](#)

