

# ICEEIT 2022 Conference Program

On behalf of the steering and organizing committees, we welcome you to the 3rd International Conference of Electrical Engineering and Information Technology ICEEIT 2022, Benghazi, Libya. This conference is held by College of Electrical and Electronics Technology-Benghazi, and it is organized jointly by:

- 1. College of Electrical and Electronics Technology-Benghazi
- 2. International Medical University
- 3. University of Benghazi
- 4. The Arab-German Young Academy of Sciences and Humanities (AGYA)
- 5. Libyan Authority for Scientific Research
- 6. Tatweer Research.

ICEEIT 2022 is a forum for scientists, engineers, and practitioners to present their latest research, results, ideas, developments, and applications in all areas of Electrical Engineering and Information Technology. The conference program exhibits exciting presentations to contributed papers and state-of-the-art lectures by invited keynote speakers.

## **ICEEIT 2022 Tracks**

- Track 1: Power Systems
- Track 2: Artificial Intelligence
- Track 3: Telecommunication
- Track 4: Software Engineering
- Track 5: Health Informatics
- Track 6: Security & Computer Networks

SUNDAY, October 30, 2022							
08:00 - 14:00	Registration @ Main Hall , College of Electrical and Electronics Technology & online						
09:00 - 09:45	Opening and Welcome @ Room1 and Online						
09:45 - 10:30	Keynote speaker: Dr. Lobna Said Nile University, Egypt, & AGYA member	Title: From the fundamentals of fractional calculus to applications in electrical engineering					
10:30 - 11:15	Keynote speaker: Dr. Nada El Darra Faculty of Health Sciences, Tarik El Jedidah,Beirut	Title: Decontamination of spices using a hurdle technology					
	Coffee Break						



11:45-13:00		Parallel Sessions			
	Session 1.1 Track 1 Room 1	Power Systems - Chair: Ahmed Tahir, Adel Rafa, Abdelnaser Elbreki			
		11:45-12:00	80	Emad Almabsout, Naser Elnaily, Maryam Majidi and Ahmad Ali Nazeri. "Optimum Allocation and Sizing of Multi-Distributed Generations: Stepby-Step Injection"	
		12:00-12:15	71	Saad Elshaikh, Khaled Sharif, Tariq Mohamed, Haytham Mustafa, Naser El Naily, Khalil Arroudi and Faisal Mohamed. "Modeling, Simulation, and Integration Considerations of Utility-Scale Solar PV to Assess FRT Detection-Libyan Sub-transmission Grid Case Study"	
		12:15-12:30	26	Aboubakr Saed and Aiman Nouh." Modeling and Load Flow Analysis for Al-Bayda City Network Integrating Battery Energy Storage and Photovoltaic System"	
		12:30-12:45	16	Nassir Abuhamoud and Yasser Nassar. "Atlas of PV Solar Module Technologies Across Libyan Territory"	
		12:45-13:00	19	Qusay Hussein Mirdas, Naseer M. Yasin and Nabil K. Alshamaa. "Grey Wolf Optimization-Based Improved Closed-Loop Speed Control for a 3-phase IM Motor Drive with SVPWM Switching and V/f Control"	
		Artificial Intelligence - Chair: Ahmed Lawgali, Wafa Eltarhouni, Mohamed Abdalla			
11:45 - 13:00	Session 1.2 Track 2 Room 2	11:45-12:00	28	Zahrah Jadah, Aisha Alfitouri, Hamouda Chantar, Mabroukah Amarif and Ahmed Abu Aeshah. "Breast Cancer Image Classification Using Deep Convolutional Neural Networks"	
		12:00-12:15	27	Mansour Essgaer and Asma Agaal. "Influence of Feature Selection Methods on Breast Cancer Early Prediction Phase using Classification and Regression Tree"	
		12:15-12:30	32	Tarek Nagem, Sohil Alshareef, Abdelhafid Mohamed, Akram Gihedan and Salma Albargathe. "Comparison Between Gramian Angular Fields (GAF) and Markov Transition Field (MTF) Images Data by Using them as Input to the Deep Learning Neural Network Solar Flare Production Platform"	
		12:30-12:45	35	Zakia Ahmed, Ahmed Lawgali and Mohamed Abdalla." Automated Glaucoma Detection based on LBP Representation and GLRLM Feature Extraction Method"	
		12:45-13:00	15	Abdelnaser Elbreki, Safa Ramdan, Faisal Mohamed, Khadija Alshari, Zakariya Rajab and Bashir Elhub. "Practical Design of an Upper Prosthetic Limb Using Three Dimensional Printer with an Artificial Intelligence Based Controller"	
		Telecom Chair: Abdelhamid Albaraesi, Ismael Alburki, Adel Emhemmed			
	Session 1.3 Track 3 Room 3	11:45-12:00	76	Ibtihal Elshami, Khalid Elwrfalli, Ali Elgayar, Mohamed Elgaud, Fathiyah Hamid and Naila Elmangosh. "Electromagnetic Shielding Behavior of Enclosures with Apertures"	
		12:00-12:15	79	Naila Jamal, Ibrahim Ighneiwa and Ibtihal El-Shami. "The Impact of Li- Fi Technology on Industrial Wireless Sensors Networks"	
		12:15-12:30	82	Sana Abdaljlil, Amer Zerek, Hosam Almqadim and Hend Eissa. "Performance Analysis of 2x2 MIMO 16-PSK with and without Applying TCM Coding Over Different Communication Channels"	
		12:30-12:45	89	Naila Jamal, Raef I. Ali, Sala-Elddin M. Basha and Ibtihal Elshami. Using CAP Modulation to Improve VLC Link with OLED Transmitter	



		12:45-13:00	37	Nafaa Shebani, Amer Zerek, Olga Boiprav and Mortda Alrejab. "Estimation of Specific Attenuation Due to Dust Storms Based on Variation of different parameters at the X, Ku and Ka Bands"	
		Software Eng Chair: Abdelbaset Elghriani, Salwa Elakeili, Aiman Gannous			
11:45 - 13:00	Session 1.4 Track 4 Room 4	11:45-12:00	6	Sohil Alshareef, Abdelsalam Maatuk, Tawfig Tawill and Shadi Aljawarneh. "A Bird's Eye View on Aspect Oriented Requirements Engineering"	
		12:00-12:15	10	Mohammed Salhoub, Abdelsalam M. Maatuk and Monther M. Elaish. An Enhanced TAM Model for Measuring the Usability of Electronic Services	
		12:15-12:30	29	Mohamed Hagal and Fatima Al Taboni." A framework for improving the process of discovering potential errors at the requirements engineering stage	
		12:30-12:45	17	Osama Alarafee, Omar Sallabi, Ahmed Altriki and Abdelsalam Maatuk. "A Framework for Exploring Factors Affecting the Usability of Electronic Payment Systems"	
13:00 - 14:00		Lunch Break			
14:00 –15:00	Parallel Sessions				
		Health informatics - Chair: Mohamed Hajal, Rafig Almaghairbe, Marwan Benidris			
	Session 2.1 Track 5 Room 1	14:00-14:15	58	Abdelsalam Maatuk, Abdelbaset M. Elghriani, Isam Denna and Amira Abdulla Werfalli. "Barriers and Opportunities to Implementing Electronic Prescription Software in Public Libyan Hospitals"	
		14:15-14:30	45	Israa M. A. Khale, Ebitisam Elberkawi, Marwa F. Gebril, Asraa A. Alamrouni and Abdelsalam Maatuk" Internet of Things Applications in Healthcare During COVID-19 Pandemic: Perspectives"	
		14:30-14:45	13	Shurouq Mahmoud Issa, Boshra Mahmoud Issa, Usama Alorafi, Ebitisam Elberkawi, Abdelsalam Maatuk and Salwa Elakeili. "The Impact of Organizational Loyalty on Job Performance: An Applied Study on University Administrative Staff"	
14:00 - 15:00		14:45-15:00	78	Alhadi Klaib, Mohamed Talooh and Abdelrahman Arabi. "E-Learning, Challenges and Opportunities of Instructors in Libyan Higher Institutes"	
		Artificial Intelligence - Chairs: Abdelhafid Mohamed, Osama BenOmran, Mussa Omar			
	Session 2.2 Track 2 Room 2	14:00-14:15	40	Ismail Alkafrawi and Zaroug Dakhell. "Blood Cells Classification Using Deep Learning Technique"	
		14:15-14:30	56	Amina Abdo, Wafa El-Tarhouni, Asma Abdulsalam and Abdelgader Altajori. "Measuring the severity of knee osteoarthritis using multi and binary Deep Convolutional Neural Network based on Contrast Limited Adaptive Histogram Equalization technique"	
		14:30-14:45	59	Ayad Saadi and Mohammed O. Mustafa. "The performance of Faster R-CNN algorithm on a dataset with poor capturing conditions"	
		14:45-15:00	86	Ramadan Elhouni, Ahmed Alwirshiffani, Abdelhafid Mohamed, Fatimah Aldeeb and Aisha Andiasha. "Comparison of Some Machine Learning Algorithms for Predicting Heart Failure"	





14:00 - 14:45		Security &	rity & Comp. Net Chair: Mohamed Musbah, Younis Younis, Adel Emhemmed			
	2.3	14:00-14:15	66	Ayad Ali Keshlaf, Faheemah Alfard and Omar M. Bouzid. An "Experiment to Evaluate IoT Application Security Scheme (IoTGazePass)"		
		14:15-14:30	91	Israa Aj and Ghaida Al-Suhail. "A QoS Evaluation of AODV Topology-Based Routing Protocol in VANETs"		
		14:30-14:45	95	Raneen I. Alessa and Ghaida A. Al-Suhail. "An Efficacy of Transmission Power on DYMO Routing Protocol in VANET"		





Monday, October 31, 2022						
08:00 - 11:00	Registra	Registration @ Main Hall , College of Electrical and Electrononics Technology & online				
9:00 – 10:30 @ Room1 & Online	Keynote speaker: Dr. Nasser Amaitik School of Engineering and Applied Science, Aston University, B4 7ET Birmingham, United Kingdom  Title: Mechanical, Biomedical & Design Engineering					
10:30 - 11:00		Coffee Break				
11:00 - 12:15				Parallel Sessions		
		Telecom Chair: Abdelhamid Albaraesi, Ismael Alburki, Adel Emhemmed				
	Session 1.1 Track 3 Room 1	11:00-11:15	77	Abdelsalam Elrashdi, Hamam Elsaiti and Musbah Frgane. "The Potential of using ZigBee Technology to Improve the Effectiveness of Smart Street Lighting Systems(SSLS)"		
11:00 - 12:00		11:15-11:30	68	Ali A. Ukasha. "Double Compression Efficiency for Image Data Hiding using Integer Wavelet Transform"		
		11:30-11:45	67	Saleh Awami and Mousa Al-Najar. "Vehicle to Infrastructure in a Semi Dynamic Environment Based on A Novell IoT 7th Layers Framework"		
		11:45-12:00	3	Nagia Ali and Jabur Ahmad. "Microstrip patch antenna design for breast cancer detection"		
	Session 1.2 Track 2 Room 2	Artificia	Inte	elligence - Chairs: Ibrahim Ighneiwa, Wafa Eltarhouni, Abdelhafid Mohamed		
		11:00-11:15	24	Hanein Omar and Ahmed Lawgali ." Speech Recognition for Early Detecting Alzheimer's Disease by Using Machine Learning Algorithms"		
		11:15-11:30	98	Souad Ashraf, Tahani Fathi and Abdislam Rhebi. "Deep Learning for Channel Estimation and Signal Detection"		
11:00 - 12:15		11:30-11:45	55	Abdulhamid Omar, Mansour Essgaer and Khamiss Ahmed. "Using Machine Learning Model To Predict Libyan Telecom Company Customer Satisfaction"		
		11:45-12:00	57	Hager Saleh, Ali Mohamed Hussien, Moatamad Refaat Hassan and Abdelmgeid A. Ali. "Predicting Stroke Disease Based on Recurrent Neural Network and Optimization techniques"		
		12:00-12:15	103	Omar Sallabi, Rafea M. Almejrb and Abdelhafid Ali Mohamed. "Applying Catboost Regression Model for Prediction of House Prices"		
	Session 1.3 Track 4 Room 3	Soft	ware	e Eng Chair: Abdelbaset Elghriani, Osama BenOmran, Rafig Almaghairbe		
11:00 - 12:15		11:00-11:15	36	Mohamed Hussein Alrfaaei and Abdulkader Sadeq Akki. "Vehicle traffic density impact on V2V link lifetime and channel capacity over VANET in Highway: A comparison study using OLSR and ACRP routing protocols"		
	· · · · · · · · · ·	11:15-11:30	8	Alhadi Klaib and Colin Venters. "A Performance Evaluation of the Clustering-based Labelling Scheme"		



13:00 – 14:00	Coffee Break		
12:15 – 13:00	Conference Closing Session		
	12:00-12:15	99	Sadam A. Almgron, Abdelsalam Maatuk and Monther Elaish. An Enhanced Technology Acceptance Model to Measure the Usability of E-Commerce Application for Agricultural Services
	11:45-12:00	52	Maryam Ibrahim Farkash, Bilal A Aljabour, Ahmed A. Mohammed Abdullah and Mohamed A E Abdalla. "Measuring the Satisfaction Level of the E-Learning Use at LIMU"
	11:30-11:45	25	Bothaina Gargoum, Ahmed Lawgali and Mohamed Abdalla." Utilizing Ear Biometrics for Individual Identifications Using HOG and LBP"





# **ICEEIT 2022 Keynote Speakers**

# TiTle: Mechanical, Biomedical & Design Engineering



Dr. Nasser Amaitik received his BSc in Industrial and Manufacturing Systems Engineering from the University of Benghazi in Libya. He awarded his post-graduate qualifications from the UK (MSc in Information and Business Systems Engineering from the University of Surrey and PhD in Computer Science from Aston University). He investigated intuitive models of assessment and decision making during his PhD research. Currently, he is working as a Research Associate at the School of Engineering and Technology, Aston University, UK. Nasser's main area of research lies in the Intelligent Knowledge Engineering for Decision Support, Predictive Modelling related to Industrial Applications, Reasoning with Uncertainty and Cost Modelling for Engineering Domain.

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# Title: From the fundamentals of fractional calculus to applications in electrical engineering



Dr. Lobna Said: (Senior Member IEEE 2020) is a full-time Associate Professor at the Faculty of Engineering and Applied Science, Nile University (NU), She is Co-Principal Investigator of two nationally-funded research projects in Egypt about wastewater treatment and smart irrigation in the 'Internet of Things' (IoT) era. Her research involves a wide range of interdisciplinary concepts drawn from mathematics, circuit theory and modelling, statistics, bio-impedance, chaos theory, and security and encryption, among others. It also integrates theoretical and experimental aspects of IoT, renewable energy, the design and application of mem-elements, and water management and agriculture. Also, she is a member of the Arab-German Young Academy of Sciences and Humanities.

Email: Lsaid@nu.edu.eg









Dr. Nada El Darra is an associate professor of food safety and technology and coordinator of the M.Sc program of Food Analysis and Safety at the Faculty of Health Sciences, Beirut Arab University, Lebanon. Her research projects focus on food safety and technology. She addresses these topics with partners from different research institutions. At the international level, She collaborated with the Institute of Sciences of Food Production (ISPA), National Research Council of Italy, on a project related to screening for mycotoxins in spices and herbs commercialized in Lebanon and Italy. Also, She is a member of the Arab-German Young Academy of Sciences and Humanities.

Email: n.aldarra@bau.edu.lb

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(9/12)



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- Mohamed Ibrahim Mohamd
- Abd Essalam Omar Hamad
- Mohamed Ahmed Awadh
- Omar Mohammed Ishteewi
- Sumayyah Salim Aldalah





## 4. TPC Members:

The conference organizers wish to thank the many reviewers for their wonderful and necessary service. Their work makes the program successful and we are quite grateful.

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Tawfig Tawill Libyan International Medical University

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