

**Theme 4-1: AI Applications - 2021**

Title	Authors	Scopus Source Title	Volume	Issue	Pages	Source type	Publication type	Open Access
Lessons learned from the underrepresentation of women in STEM: AI-enabled solutions and more	Abuwatfa, W.   Zamel, N.   Al-Othman, A.	Energy and AI	5	-	-	Journal	Article	Gold
A remote healthcare monitoring framework for diabetes prediction using machine learning	Ramesh, J.   Aburukba, R.   Sagahyroon, A.	Healthcare Technology Letters	8	3	45-57	Journal	Article	Gold Green
Prediction of EV charging behavior using machine learning	Shahriar, S.   Al-Ali, A.R.   Osman, A.H.   Dhoul, S.   Nijim, M.	IEEE Access	9	-	111576-111586	Journal	Article	Gold
Atrial fibrillation classification with smart wearables using short-term heart rate variability and deep convolutional neural networks	Ramesh, J.   Solatidehkordi, Z.   Aburukba, R.   Sagahyroon, A.	Sensors	21	21	-	Journal	Article	Gold Green
Using IoT and smart monitoring devices to optimize the efficiency of large-scale distributed solar farms	Shapsough, S.   Takroui, M.   Dhaouadi, R.   Zualkernan, I.A.	Wireless Networks	27	6	4313-4329	Journal	Article	0
A re-organizing biosurveillance framework based on fog and mobile edge computing	Al-Zinati, M.   Alrashdan, R.   Al-Duwairi, B.   Aloqaily, M.	Multimedia Tools and Applications	80	11	16805-16825	Journal	Article	Bronze Green
An AIoT System for Bat Species Classification	Zualkernan, I.   Judas, J.   Mahbub, T.   Bhagwagar, A.   Chand, P.	IoTaIS 2020 - Proceedings: 2020 IEEE International Conference on Internet of Things and Intelligence Systems	-	-	155-160	Conference Proceeding	Conference Paper	0
Network Intrusion Detection on the IoT Edge Using Adversarial Autoencoders	Aloul, F.   Zualkernan, I.   Abdalgawad, N.   Hussain, L.   Sakhnini, D.	2021 International Conference on Information Technology, ICIT 2021 - Proceedings	-	-	120-125	Conference Proceeding	Conference Paper	0
A Mobile-Based Novice Agriculturalist Plant Care Support System: Classifying Plant Diseases using Deep Learning	Reda, M.   Suwwan, R.   Alkafri, S.   Rashed, Y.   Shanableh, T.	2021 12th International Conference on Information and Communication Systems, ICICS 2021	-	-	411-418	Conference Proceeding	Conference Paper	0
Deep Learning at the Edge for Operation and Maintenance of Large-Scale Solar Farms	Shapsough, S.   Zualkernan, I.   Dhaouadi, R.	Lecture Notes of the Institute for Computer Sciences, Social- Informatics and Telecommunications Engineering, LNICST	354	-	27-44	Book Series	Conference Paper	0
Unsupervised clustering of skills for an online learning platform	Ahmed, A.   Zualkernan, I.   Elghazaly, H.	Proceedings - IEEE 21st International Conference on Advanced Learning Technologies, ICALT 2021	-	-	200-202	Conference Proceeding	Conference Paper	0
Classifying Olive Fruits Based on Produced Oil Quality: A Benchmark Dataset and Strong Baselines	Ghandour, M.   Al-Qurran, R.   Al-Ayyoub, M.   Shatnawi, A.   Alsmirat, M.   Costen, F.	2021 12th International Conference on Information and Communication Systems, ICICS 2021	-	-	495-501	Conference Proceeding	Conference Paper	0
EXPLORING PREDICTING PERFORMANCE OF ENGINEERING STUDENTS USING DEEP LEARNING	Zualkernan, I.	18th International Conference on Cognition and Exploratory Learning in Digital Age, CELDA 2021	-	-	227-234	Conference Proceeding	Conference Paper	0
Using Machine Learning to Predict Diabetes Complications	Jian, Y.   Pasquier, M.   Sagahyroon, A.   Aloul, F.	BioSMART 2021 - Proceedings: 4th International Conference on Bio-Engineering for Smart Technologies	-	-	-	Conference Proceeding	Conference Paper	0
Reliability analysis of strength models for short-concrete columns under concentric loading with FRP rebars through Artificial Neural Network	Ahmad, A.   Elchalakani, M.   Elmesalami, N.   El Refai, A.   Abed, F.	Journal of Building Engineering	42	-	-	Journal	Article	
Development of Fault-Detection ANNs for Structural Damage Prediction	AlHamaydeh, M.H.   Mohamed, A.F.   Awad, M.I.	American Concrete Institute, ACI Special Publication	SP-350	-	45-53	Conference Proceeding	Conference Paper	
Prediction of COVID-19 Hospital Length of Stay and Risk of Death Using Artificial Intelligence-Based Modeling	Mahboub, B.   Bataineh, M.T.A.   Alshraideh, H.   Hamoudi, R.   Salameh, L.   Shamayleh, A.	Frontiers in Medicine	8	-	-	Journal	Article	Gold Green