

1. Record Nr.	UNINA9910841861203321
Autore	Gherabi Noredine
Titolo	Advances in Intelligent System and Smart Technologies : Proceedings of I2ST'23
Pubbl/distr/stampa	Cham : , : Springer International Publishing AG, , 2024 ©2024
ISBN	3-031-47672-7
Edizione	[1st ed.]
Descrizione fisica	1 online resource (417 pages)
Collana	Lecture Notes in Networks and Systems Series ; ; v.826
Altri autori (Persone)	AwadAli Ismail NayyarAnand BahajMohamed
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	<p>Intro -- Preface -- Specific Topics -- Committee -- Keynote Speakers -- About This Book -- Contents -- A New Design of 5G Planar Antenna with Enhancement of the Gain Using Array Antenna -- 1 Introduction -- 2 Design Methodologies -- 2.1 A Conventional Square Patch Antenna's Design -- 2.2 Design of a 1×4 Antenna Array Containing 4 Radiation Elements -- 2.3 Design of a 4×4 Antenna Array Containing 16 Radiation Elements -- 2.4 Design of a 8×4 Antenna Array Containing 32 Radiation Elements -- 3 Conclusion and Perspectives -- References -- Temperature Forecast Using Machine Learning -- 1 Introduction -- 2 Related Work -- 3 Methodology -- 4 Study Area -- 5 Results and Discussion -- 6 Conclusion -- References -- Digital Twin-Based Approach for Electric Vehicles: E-Mule Project -- 1 Introduction -- 2 Digital Twin: Background and Definitions -- 3 Related Works -- 4 E-Mule Digital Twin -- 4.1 Induction Motor -- 4.2 Lithium-Ion Battery -- 5 Technical Solutions -- 5.1 Data Collection -- 5.2 Data Transmission -- 5.3 3D Modeling -- 6 Conclusion -- References -- Vision-Based Fall Detection Systems Using 3D Skeleton Features for Elderly Security: A Survey -- 1 Introduction -- 2 Fall Detection System: Overview -- 3 Fall Detection Skeleton Datasets -- 3.1 Human Body Representation -- 3.2 Available 3D Skeletal Datasets -- 3.3 Limitation and Challenges -- 4 Vision-Based Fall Detection Approaches -- 5</p>

Conclusion -- References -- Capacity Prediction for Lithium-Ion Batteries Using Different Neural Networks Methods -- 1 Introduction -- 2 Proposed Methods -- 3 Capacity Estimation -- 3.1 Nasa Datasets Prediction -- 4 Comparative Results Analysis -- 5 Conclusion -- References -- Deployment of Deep Learning in BlockChain Technology for Credit Card Fraud Prevention -- 1 Introduction -- 2 Background and Motivation -- 2.1 What is Blockchain?.
2.2 How Does the Blockchain Work? -- 2.3 Strengths of Blockchain -- 2.4 BlockChain Weaknesses -- 2.5 Chainlink -- 3 Methodology -- 3.1 Deep Learning Model -- 3.2 Blockchain -- 3.3 External Adapter -- 3.4 Cryptocurrency -- 4 Visualization -- 4.1 Normal User -- 4.2 Contract's Owner -- 5 Conclusion -- References -- A Survey on Cybersecurity Techniques Toward Convolutional Neural Network -- 1 Introduction -- 2 The Fundamentals of CNN -- 3 Security Threats Toward CNN -- 4 Detection Techniques of CNN -- 4.1 Malware Classification -- 4.2 Malware Detection -- 5 Conclusion -- References -- Publications and Messages Exchanged in a Chat Room Analysis -- 1 Introduction -- 2 Related Work -- 3 Proposed Model and Algorithms -- 3.1 Centers of Interests -- 3.2 Psychological Profile -- 3.3 Relational Profile -- 4 Results and Discussion -- 4.1 Profiling System Result -- 5 Conclusion -- References -- Detection of Common Risk Factors Leading to the Cardiovascular Illness Using Machine Learning -- 1 Introduction -- 2 Related Works -- 3 Methodology -- 3.1 BRFSS Heart Disease Dataset -- 3.2 Datasets Preprocessing -- 3.3 Model Training -- 4 Results -- 5 Discussion -- 6 Conclusion -- References -- Machine Learning Models for Detection COVID-19 -- 1 Introduction -- 2 State of the Art -- 3 Functional Testing Methods -- 3.1 PCR Test -- 3.2 Chest Radiography Images -- 4 COVID19 Detection Models Using Machine Learning Approaches -- 5 Comparison Study Between Methods -- 6 Conclusion and Discussion -- References -- DoS and DDoS Cyberthreats Detection in Drone Networks -- 1 Introduction -- 2 Context of the Study -- 2.1 Fleet of Drones -- 2.2 DoS and DDoS Cyber-Attacks -- 2.3 Network Intrusion Detection Systems (NIDS) -- 3 Related Work -- 3.1 State of the Art -- 3.2 Discussion -- 4 Proposed Approach -- 4.1 Architecture of the Proposed NIDS.
4.2 Operating Principle of the Proposed Model of NIDS -- 5 Experimentation and Tests -- 5.1 CICIDS2017 Dataset -- 5.2 Algorithms Used to Model Benign Network Traffic and DoS/DDoS Attacks -- 6 Summary of Benign Traffic and Attacks Classification Results -- 7 Conclusion -- References -- Artificial Intelligence in Supply Chain 4.0: Using Machine Learning in Demand Forecasting -- 1 Introduction -- 2 Demand Forecasting in Supply Chain -- 3 Machine Learning Model for Demand Forecasting in Supply Chain -- 3.1 Methodology -- 3.2 Data Visualization -- 3.3 Data Segmentation -- 3.4 Data Modeling -- 3.5 Model Evaluation -- 3.6 Comparison of Classifications Models -- 4 Conclusion -- References -- COVID-19 Prediction Applying Machine Learning and Ontological Language -- 1 Introduction -- 2 Literature Review -- 3 Methodology of Research -- 3.1 Data Preprocessing -- 3.2 Machine Learning Decision Tree Algorithm -- 3.3 Ontology Engineering -- 4 Result and Discussion -- 5 Conclusion -- References -- EEG-Based Drivers Drowsiness Prediction Using Personalized Features Extraction and Classification Methods Under Python -- 1 Introduction -- 2 Method -- 2.1 Acquisition and Preprocessing -- 2.2 Main Processing Method -- 2.3 Classification and Predicting -- 3 Results and Discussion -- 4 Conclusion -- References -- A Systematic Review on Blind and Visually Impaired Navigation Systems -- 1 Introduction -- 2 Literature Review -- 2.1 Research Methodology -- 2.2 State-of-the-Art -- 3 Discussion and

Recommendations -- 3.1 Discussion -- 3.2 Recommendations -- 4 Conclusion and Future Work -- References -- Comparison of Deep Learning-Based Channel Estimator and Classical Estimators in VANET -- 1 Introduction -- 2 IEEE 802.11p Standard -- 2.1 Environment and Vehicle-To-Vehicle Channel -- 2.2 Channel Vehicle-to-Vehicle Model -- 3 Estimation and Interpolation of Channel.

3.1 LS Channel Estimation Algorithm -- 3.2 MMSE Channel Estimation Algorithm -- 3.3 Linear Interpolation -- 3.4 Spline Cubic Interpolation -- 4 Channel Estimators Based on Neural Networks -- 4.1 Estimator and Structure OFDM -- 4.2 Channel Estimator Structure of Basic Neural Network -- 5 Simulation and Results -- 5.1 Simulations Parameters -- 5.2 Channel's Coherence Time Effect -- 6 Conclusion -- References

-- Decision Support Systems Based on Artificial Intelligence for Supply Chain Management: A Literature Review -- 1 Introduction and Motivation -- 2 Concepts -- 2.1 Supply Chain Management -- 2.2 Decision Support System -- 3 DSS Based IA for SCM: A Literature Review -- 3.1 Research Methodology -- 3.2 Adopted IA Methods in SCM -- 4 Discussion -- 5 Conclusion -- References -- Minimization of Task Offloading Latency for COVID-19 IoT Devices -- 1 Introduction -- 2 Related Work and Motivation -- 2.1 Latency -- 2.2 Energy Consumption -- 3 System Model -- 4 Problem Formulation -- 5 Results and Discussion -- 6 Conclusion and Perspectives -- References

-- Machine Learning, Deep Learning, and Computer Vision for Age and Gender Detection -- 1 Introduction -- 2 Related Work -- 3 Dataset -- 4 Methods and Materials -- 4.1 Computer Vision -- 4.2 Machine Learning -- 4.3 Deep Learning -- 4.4 Model Architecture Overview -- 5 Results and Discussion -- 6 Conclusion -- References -- Grape and Apple Plant Diseases Detection Using Enhance DenseNet121 Based Convolutional Neural Network -- 1 Introduction -- 2 Related Work -- 3 Material and Method -- 3.1 Dataset -- 3.2 Image Preprocessing and Data Augmentation -- 3.3 Convolutional-Neural-Network Models -- 3.4 Transfer-Learning Approach -- 3.5 Proposed System -- 4 Experiment Results -- 4.1 Performance Evaluation -- 4.2 Parameters -- 4.3 Results Analysis and Comparison -- 5 Conclusion -- References.

Operational Code Based on the Lattice Boltzmann Method for Coastal Flows: Application to Oualidia Lagoon -- 1 Introduction -- 2 Presentation of the Shallow Water Equations -- 3 Lattice Boltzmann Method (LBM) -- 3.1 Lattice Pattern -- 3.2 Boundary Conditions -- 4 Flowchart of the Operational Code -- 5 Numerical Test -- 6 Application to Oualidia Lagoon -- 7 Conclusion -- References -- The Use of Chatbots as Supportive Agents in Air Transportation Systems -- 1 Introduction -- 2 Literature Review -- 3 Chatbots and Artificial Intelligence -- 3.1 Chatbots -- 3.2 Artificial Intelligence and Chatbots -- 3.3 Chatbot Frameworks -- 4 The Proposed Methodology -- 4.1 Case Study -- 4.2 Conception of Chatbot -- 5 Results and Discussion -- 6 Conclusion -- References -- The Conception of a Controlled Trigonometric Phase Locked Loop Working Under Grid Anomalies Conditions -- 1 Introduction -- 2 Methods -- 2.1 A Conventional PLL in the Synchronous dq Frame -- 2.2 Trigonometric Phase Locked Loop -- 3 Results and Discussion -- 3.1 Time Response of the Controlled PLL and Angle Jump Test -- 3.2 Unbalanced Grid Voltage -- 3.3 Non Sinusoidal Grid Voltage -- 4 Conclusion -- References -- A Deep Learning Model for Intrusion Detection with Imbalanced Dataset -- 1 Introduction -- 2 Related Work -- 3 Background -- 4 Deep Learning -- 4.1 Feature Selection -- 5 Our Approach -- 5.1 NSL-KDD -- 5.2 Shap Value, Boruta and Anova f-test -- 6 Experimental Results and Discussion -- 7 Conclusion -- References -- Towards Complex Systems Behavioral Prediction: A Survey of Artificial Intelligence

Applications -- 1 Introduction -- 1.1 Complex Systems -- 1.2
Characteristics of Complex Systems -- 1.3 Complex Adaptive Systems
-- 2 Flood Prediction -- 3 Fetal Monitoring -- 4 Electrical Systems
and Renewable Energies -- 5 Extreme Events and Critical Transitions --
6 Forest Fire.
7 Financial Markets.
