

1. Record Nr.	UNINA9910497102003321
Autore	Raj Jennifer S
Titolo	Intelligent Sustainable Systems : Proceedings of ICISS 2021
Pubbl/distr/stampa	Singapore : , : Springer Singapore Pte. Limited, , 2021 ©2022
ISBN	981-16-2422-4
Descrizione fisica	1 online resource (844 pages)
Collana	Lecture Notes in Networks and Systems Ser. ; ; v.213
Altri autori (Persone)	PalanisamyRam Perikoslsidoros ShiYong
Soggetti	Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Foreword -- Preface -- Acknowledgments -- Contents -- Editors and Contributors -- Deep Learning-Based Approach for Parkinson's Disease Detection Using Region of Interest -- 1 Introduction -- 1.1 Subject-Level Classification -- 1.2 Region of Interest -- 1.3 Model Generalizability -- 1.4 Data Leakage -- 2 Literature Survey -- 3 Dataset Description -- 4 Methodology -- 4.1 Data Preprocessing -- 4.2 Architecture -- 4.3 Evaluation Metrics -- 5 Experiments and Results -- 5.1 Subject-Level Classification -- 5.2 Region of Interest -- 5.3 Model Generalizability -- 5.4 Effect of Data Leakage -- 6 Conclusion -- References -- Classification of Class-Imbalanced Diabetic Retinopathy Images Using the Synthetic Data Creation by Generative Models -- 1 Introduction -- 2 Methodology -- 2.1 Dataset Description -- 2.2 Retinal Synthetic Image Generation -- 2.3 CNN Classifier -- 3 Experimental Results and Discussions -- 4 Conclusion -- References -- A Novel Leaf Fragment Dataset and ResNet for Small-Scale Image Analysis -- 1 Introduction -- 2 Dataset Preparation -- 2.1 Data Collection -- 2.2 Image Pre-processing -- 2.3 Post-processing -- 2.4 Filename-Format -- 3 Residual Neural Network for Cotyledon-Type Identification and Plant Species Classification -- 3.1 Dataset Formulation and Feature Description -- 3.2 Residual Block -- 3.3 Methodology -- 4 Results -- 4.1 Cotyledon-

Type Identification -- 4.2 Plant Species Classification -- 5 Discussion -- 6 Comparison Between Applied ResNet and ResNet-152 V2 -- 7 Conclusion and Possible Future Contributions -- References -- Prediction of Covid 19 Cases Based on Weather Parameters -- 1 Introduction -- 2 Review of Related Literature Paper -- 3 Methodology Used -- 3.1 Dataset Used -- 3.2 Correlation Study of the Factors -- 3.3 Mean Squared Error -- 3.4 Models Used for Study -- 3.5 Analysis Performed -- 4 Experiment Results.

4.1 Linear Regression -- 4.2 Decision Tree Regression -- 4.3 Random Forest Regression -- 5 Conclusion -- References -- CloudML: Privacy-Assured Healthcare Machine Learning Model for Cloud Network -- 1 Introduction -- 2 Related Work -- 3 Proposed Approaches -- 3.1 Unsupervised K-Means Clustering Algorithm -- 3.2 Secured Multi-party Addition Algorithm -- 3.3 Paillier Homomorphic Encryption -- 4 Work Done -- 5 Experimental Results and Discussion -- 5.1 Communication Overhead -- 5.2 Storage Overhead -- 5.3 Scalability -- 5.4 Encryption Cost -- 5.5 Runtime Analysis on Data Points -- 5.6 Runtime Analysis on Data Dimensionality -- 6 Limitations and Future Work -- 7 Concluding Remarks -- References -- Performance Evaluation of Hierarchical Clustering Protocols in WSN Using MATLAB -- 1 Introduction -- 2 Radio Model -- 3 Overview of Clustering Protocols -- 3.1 LEACH (Low-Energy Adaptive Clustering Hierarchy) -- 3.2 LEACH in Heterogeneous Environment -- 3.3 LEACH-C -- 3.4 SEP -- 3.5 DEEC -- 3.6 DDEEC -- 4 Simulation Scenario and Performance Metrics -- 5 Simulation Results -- 5.1 Scenario 1 -- 5.2 Scenario 2 -- 5.3 Scenario 3 -- 6 Conclusion -- References -- Speech Recognition Using Artificial Neural Network -- 1 Introduction -- 2 Theory -- 2.1 Artificial Neural Networks from the Viewpoint of Speech Recognition -- 2.2 Training -- 2.3 Proposed Model -- 3 Methodology -- 3.1 Different Approaches for Reducing the Error -- 3.2 Changing the Combination and Number of Inputs -- 3.3 Increasing the Number of Hidden Neurons -- 3.4 ANFIS (Adaptive Neuro-Fuzzy Inference System) -- 4 Simulation Results -- 5 Conclusion -- References -- Multi-objective Optimization for Dimension Reduction for Large Datasets -- 1 Introduction -- 2 Literature Review -- 3 Research Challenges -- 4 Feature Selection and Extraction -- 4.1 Principle Component Analysis (PCA). 4.2 Linear Discriminant Analysis (LDA) -- 4.3 Correlation Analysis (CA) -- 4.4 Autoencoders (AE) -- 4.5 Swarm Intelligence -- 5 Proposed Methodology -- 6 Discussion -- 7 Conclusion -- References -- Modified Leader Algorithm for Under-Sampling the Imbalanced Dataset for Classification -- 1 Introduction -- 2 Proposed Work -- 2.1 Algorithm -- 3 Experimental Results -- 4 Conclusion -- References -- Weather Divergence of Season Through Regression Analytics -- 1 Introduction -- 2 Literature Survey -- 3 Methodology -- 3.1 Importing All the Packages -- 3.2 Importing Dataset -- 3.3 Multilinear Regression -- 3.4 Quantile Regression -- 3.5 Covariance and Correlation -- 3.6 Algorithm -- 4 Flowchart -- 5 Results -- 6 Conclusion -- 7 Future Scope -- References -- A Case Study of Energy Audit in Hospital -- 1 Introduction -- 2 Methodology -- 3 Data Analysis -- 3.1 Data Cleaning -- 3.2 Connected Load and Electricity Bill Analysis -- 3.3 Maximum Contract Demand Calculations -- 3.4 Transformer Analysis -- 3.5 Illumination Load Analysis -- 3.6 Cooling Load Analysis -- 3.7 PQ Analyzer -- 4 Discussion -- 5 Conclusion -- References -- The Comparison Analysis of Cluster and Non-cluster Based Routing Protocols for WAPMS (Wireless Air Pollution Monitoring System) -- 1 Introduction -- 2 Main Significance of Air Pollution Monitoring System in WSN -- 3 Literature Review -- 4 Category of the Routing Protocols Used in Air Pollution Monitoring System in WSN -- 4.1 Cluster-Based

Routing Protocols in WAPMS -- 4.2 Non-cluster Based Protocols  
in WAPMS -- 5 Conclusion and Future Scope -- References -- Frequent  
Itemset Mining Algorithms-A Literature Survey -- 1 Introduction -- 2  
Frequent Itemset Mining Algorithms-A Literature Survey -- 2.1 Building  
of LP-Tree -- 2.2 Construction of k-FIU-Tree is as Described as Below  
-- 3 Problems and Defntons -- 4 Conclusion -- References.  
Impact of Segmentation Techniques for Conditon Monitorng  
of Electrical Equipments from Thermal Images -- 1 Introduction -- 2  
Literature Survey -- 3 Research Database -- 4 Image Segmentation  
Techniques for Thermographs -- 5 Conclusion and Future Work --  
References -- A Detailed Survey Study on Various Issues  
and Techniques for Security and Privacy of Healthcare Records -- 1  
Introduction -- 2 Related Works -- 3 Big Data Applications-An Analysis  
-- 4 A Secured Big Data and ML-Based Framework -- 5 Classification  
on Privacy Preserving -- 6 Big Data Life Cycle -- 7 Cloud-Based  
Framework with Image Processing -- 8 Conclusion -- References --  
Performance Analys of Different Classfcaton Algorithms for Bank  
Loan Sectors -- 1 Introduction -- 2 Build Data Model -- 3  
Classfcaton Algorithms -- 3.1 Implementation of K-Nearest Neighbor  
(KNN) -- 3.2 Implementation of Decision Tree -- 3.3 Implementation  
of Support Vector Machine (SVM) -- 3.4 Implementation of Logistic  
Regression -- 4 Performance Metrics -- 4.1 Jaccard Similarity Score --  
4.2 F1 Score -- 4.3 Log Loss -- 5 Result Analysis -- 6 Conclusion --  
References -- Universal Shift Register Designed at Low Supply Voltages  
in 20 nm FinFET Using Multiplexer -- 1 Introduction -- 2 Structural  
Design and Aspects in FinFETs -- 3 Design and Realization of 4-Bit  
Universal Shift Register -- 4 Simulation Results of 4-Bit Universal Shift  
Register -- 5 Conclusion -- References -- Predicting Graphical User  
Personality by Facebook Data Mining -- 1 Introduction -- 2 Related  
Work -- 3 Exam Dataset -- 4 My Personality Information -- 5 Results  
-- 6 Classification Models Assessment -- 7 Conclusion -- References  
-- Deep Learning in Precision Medicine -- 1 Introduction -- 2 Deep  
Learning in Medical Imaging -- 3 Deep Learning in Disease Detection  
-- 4 Deep Learning in Drug Discovery and Design.  
5 Deep Learning in Personalized Healthcare -- 6 Summary --  
References -- Improved Stress Prediction Using Differential Boosting  
Particle Swarm Optimization-Based Support Vector Machine Classifier  
-- 1 Introduction -- 2 Related Works -- 3 Differential Boosting Particle  
Swarm Optimization-Based Support Vector Machine (DBPSO-SVM) -- 4  
Results and Discussion -- 4.1 Dataset Description -- 4.2 Validation  
Technique -- 4.3 Performance Metrics -- 4.4 Result Analysis -- 5  
Conclusion -- References -- Closed-Loop Control of Solar Fed High  
Gain Converter Using Optimized Algorithm for BLDC Drive Application  
-- 1 Introduction -- 2 Overview of DC-DC Converter Fed BLDC Drive  
with PSO-PID Controller -- 3 Designing and Modelling of High Gain  
DC-DC Converter -- 4 Control of BLDC Drive-by Electronic  
Commutation -- 5 Control Algorithm -- 5.1 PSO Algorithm -- 6  
Simulation Validation and Discussion of Proposed System -- 7  
Conclusion -- References -- Internet of Things-Based Design of Smart  
Speed Control System for Highway Transportation Vehicles -- 1  
Introduction -- 2 Proposed System Description -- 2.1 Cloud Server --  
2.2 Arduino Uno -- 2.3 WiFi Module -- 2.4 GSM Module -- 2.5 Motor  
Driver -- 2.6 GPS Module -- 2.7 LCD Display -- 3 Proposed System  
Implementation -- 3.1 Hardware Implementation -- 3.2 Software  
Implementation -- 4 Results and Discussions -- 5 Conclusion --  
References -- Effective Ensemble Dimensionality Reduction Approach  
Using Denoising Autoencoder for Intrusion Detection System -- 1  
Introduction -- 2 Related Works -- 3 Methodologies Adopted -- 3.1

Spearman's Cross-Correlation -- 3.2 Autoencoder -- 4 Proposed Work  
-- 4.1 Feature Encoding -- 4.2 Feature Scaling -- 4.3 Feature Selection  
-- 4.4 Feature Projection and Classification -- 5 Experiments  
and Results -- 5.1 Dataset -- 5.2 Data Preprocessing -- 5.3 Test Bed  
-- 5.4 Evaluation Metrics and Result Analysis.  
6 Conclusion.

---