

1. Record Nr.	UNISA996547970903316
Titolo	Computer vision and machine intelligence paradigms for SDGs : select proceedings of ICRTAC-CVMIP 2021 / / edited by R. Jagadeesh Kannan, Sabu M. Thampi, Shyh-Hau Wang
Pubbl/distr/stampa	Singapore : , : Springer, , [2023] ©2023
ISBN	981-19-7169-2
Descrizione fisica	1 online resource (339 pages)
Collana	Lecture Notes in Electrical Engineering ; ; v.967
Disciplina	060
Soggetti	Artificial intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Intro -- Preface -- Contents -- Editors and Contributors -- PTZ-Camera-Based Facial Expression Analysis using Faster R-CNN for Student Engagement Recognition -- 1 Introduction -- 2 Related Work -- 2.1 Contribution and Objective -- 3 Methodology -- 3.1 Face Detection using YOLO Detector -- 3.2 Detection of Landmark Points using Ensemble of Robust Constrained Local Models (CLM) -- 3.3 Affine Transformation -- 3.4 Face Expression Recognition using Faster R-CNN (Faster Regions with Convolutional Neural Network) -- 4 Results and Discussion -- 4.1 Performance Analysis -- 5 Conclusion -- References -- Convergence Perceptual Model for Computing Time Series Data on Fog Environment -- 1 Introduction -- 1.1 Goals Aimed at the Convergence Fog Model -- 1.2 Fog for Time-Series Computing -- 1.3 Proposed Convergence Perceptual Architecture -- 1.4 Perceptual Layer on CPM -- 2 Conclusion -- References -- Localized Super Resolution for Foreground Images Using U-Net and MR-CNN -- 1 Introduction -- 2 Literature Survey -- 3 Proposed Architecture -- 4 Implementation and Training -- 4.1 Dataset and Augmentation -- 4.2 Model Architecture -- 4.3 Loss Function and Optimizer -- 4.4 Training -- 5 Evaluation Metrics -- 5.1 PSNR-Peak Signal-To-Noise Ratio -- 5.2 SSIM-Structural Similarity Index -- 5.3 Universal Image Quality Index -- 6 Results and Discussion -- 7 Conclusion and Future Work -- References -- SMS Spam Classification Using PSO-C4.5 -- 1

Introduction -- 2 Problem Statement -- 3 Research Objective -- 4  
Review of Literature -- 4.1 Review of Text-Processing -- 4.2 Review on Feature Extraction -- 4.3 Review on Feature Selection -- 4.4 Review on Classifiers -- 5 Research Contribution -- 6 Data Collection and Data Sampling -- 7 Experimental Results -- 8 Conclusion and Future Enhancement -- References.  
Automated Sorting, Grading of Fruits Based on Internal and External Quality Assessment Using HSI, Deep CNN -- 1 Introduction -- 2 Related Works -- 3 Overview of Proposed Idea -- 3.1 Preprocessing -- 3.2 Segmentation -- 3.3 CNN Model Development -- 4 Experimental Results and Discussion -- 4.1 Experimental Setup -- 4.2 Performance Measures -- 4.3 Experimental Results -- 5 Conclusion -- References -- Pest Detection Using Improvised YOLO Architecture -- 1 Introduction -- 2 Literature Review -- 2.1 Pest Detection Methods -- 2.2 Pest Classification Methods -- 3 YOLO V3 Architecture -- 4 Improvised YOLO V3 Architecture -- 5 Results and Discussions -- 6 Conclusion -- References -- Classification of Fungi Effected Psidium Guajava Leaves Using ML and DL Techniques -- 1 Introduction -- 2 Literature Survey -- 3 Overview of Database -- 4 Proposed Method/Model -- 4.1 Classification Using Deep Learning Techniques -- 5 Experimental Results -- 5.1 Experimental Results Using Deep Learning Techniques -- 6 Comparative Analysis -- 7 Conclusions -- References -- Deep Learning Based Recognition of Plant Diseases -- 1 Introduction -- 2 Literature Review -- 3 Scope -- 4 Methodology -- 4.1 Procedure -- 4.2 Library -- 5 Results and Findings -- 6 Discussion -- 7 Conclusion -- 8 Future Scope -- 9 Recommendation -- References -- Artificial Cognition of Temporal Events Using Recurrent Point Process Networks -- 1 Introduction -- 2 Recurrent Point Process Network -- 2.1 Recurrent Neural Network -- 2.2 Interoperability and Prediction Module -- 2.3 Point Processes Equations -- 3 Automated Data Relation Process -- 3.1 Model Creation -- 3.2 Training Phase -- 3.3 Testing Phase -- 3.4 Anomaly Detection -- 3.5 Visualization -- 4 Temporal Variation Samples -- 4.1 Synchronous Event -- 4.2 Asynchronous Event -- 5 Conclusion -- References.  
Performance Analysis of Energy Efficient Video Transmission Using LEACH Based Protocol in WSN -- 1 Introduction -- 2 Related Work -- 3 Problem Statement and Our Contribution -- 4 LEACH Based Routing Protocol -- 5 Video Transmission Over WSN -- 6 Experimental Result -- 7 Conclusion -- References -- Hybridization of Texture Features for Identification of Bi-Lingual Scripts from Camera Images at Wordlevel -- 1 Introduction -- 2 Review of Literature -- 3 Proposed Method -- 3.1 Creation of LBP Image -- 3.2 Extraction of GLCM Feature from LBP Image -- 3.3 Extraction HOG Feature from LBP Image -- 3.4 Combined Feature Vector of GLCM and HOG from LBP Image -- 4 Experimental Results and Discussion -- 4.1 Results and Discussion -- 5 Conclusion -- References -- Advanced Algorithmic Techniques for Topic Prediction and Recommendation-An Analysis -- 1 Introduction -- 2 Proposed Model -- 2.1 Hashtag-Based Approach -- 2.2 Word Ranking Based Approach -- 2.3 Authority Weighting Based Approach -- 2.4 Background Tweet Detection-Based Approach -- 2.5 Short-Term Fluctuation Modeling Based Approach -- 3 Results and Discussion -- 4 Conclusion -- References -- Implementation of an Automatic EEG Feature Extraction with Gated Recurrent Neural Network for Emotion Recognition -- 1 Introduction -- 2 Related Study -- 3 Methodology -- 3.1 Preprocessing -- 3.2 Feature Extraction -- 3.3 Classifier -- 4 Results and Discussions -- 4.1 Dataset -- 4.2 Implementation -- 5 Conclusion -- References -- High Performance Classifier for Brain Tumor Detection Using Capsule Neural Network -- 1 Introduction -- 2

Methods -- 2.1 Convolutional Neural Network -- 2.2 Capsule Networks  
-- 3 Literature Survey -- 4 Proposed Model -- 4.1 Capsule Network  
Model Creation -- 4.2 Prediction -- 5 Proposed Algorithm -- 5.1  
Prediction Through Flask Framework -- 6 Results and Discussions --  
6.1 Accuracy.  
6.2 Predicting Tumor -- 6.3 Training and Validation -- 7 Conclusion --  
References -- Mining Suitable Symptoms to Identify Disease Using  
Apriori and NBC -- 1 Introduction -- 2 Review of Literature -- 3  
Association Rule Mining -- 4 Proposed Work -- 4.1 Apriori Algorithm  
-- 5 Conclusion -- References -- Background Features-Based Novel  
Visual Ego-Motion Estimation -- 1 Introduction -- 1.1 Related Work --  
2 Algorithm -- 2.1 System Overview -- 2.2 Steerable Pyramid  
Transformation (SPT) -- 2.3 Keypoint Detection and Matching -- 2.4  
Ransac -- 3 Experimental Results -- 4 Conclusion -- References --  
Livspecs: Design and Implementation of Smart Specs for Hearing  
and Visually Challenged Persons -- 1 Introduction -- 2 Literature  
Survey -- 3 Proposed System -- 4 Result and Discussion -- 5  
Conclusion -- References -- Self-balancing Robot Using Arduino  
and PID Controller -- 1 Introduction -- 2 Related Works -- 3 Proposed  
Methodology -- 3.1 Block Diagram of the Two-Wheeled Robot -- 3.2  
Working Principle -- 3.3 Control Action -- 4 Results and Discussion --  
5 Conclusion -- References -- A Survey Based on Online Voting System  
Using Blockchain Technology -- 1 Introduction -- 2 Background -- 2.1  
Overview of Computerized Voting System -- 2.2 Blockchain Technology  
-- 2.3 Analysis of Ethereum -- 3 Comparative Study of Blockchain-  
Based Electronic Voting Plans -- 4 Discussion -- 5 Conclusion  
and Future Work -- References -- Survey on Collaborative Filtering  
Technique for Recommender System Using Deep Learning -- 1  
Introduction -- 2 Recommender Systems -- 2.1 Deep Learning-Based  
Recommendation Systems -- 2.2 Deep Collaborative Filtering  
Techniques -- 2.3 Datasets -- 3 Recommendation System Applications  
-- 4 Conclusion -- References -- A Survey on Power Consumption  
Indicator Using Machine Learning-Based Approach -- 1 Introduction --  
2 System Description.  
2.1 Power Limit Indicator System (PLIS) -- 2.2 PLIS Basic Flow -- 3  
Review and Analysis of Power Consumption Systems -- 4 Conclusion --  
References -- A Novel Hand Gesture Recognition for Aphonic People  
Using Convolutional Neural Network -- 1 Introduction -- 2 Proposed  
Methodology -- 2.1 Binarization -- 2.2 Contour Detection -- 2.3  
Feature Extraction Using Sift Algorithm -- 2.4 Classification Using  
Convolutional Neural Network -- 3 Experimental Results -- 4  
Conclusion and Future Enhancement -- References -- Comprehensive  
Analysis of Defect Detection Through Image Processing and Machine  
Learning for Photovoltaic Panels -- 1 Introduction -- 1.1 Photovoltaic  
Panels -- 1.2 Defects in Photovoltaic Panels -- 2 Fault Identification  
System -- 2.1 Image Processing-Based Defect Identification -- 2.2  
Machine Learning-Based Defect Identification -- 2.3 Deep Learning-  
Based Defect Identification -- 3 Experimental Results and Analysis --  
3.1 Canny Edge Detector -- 3.2 Support Vector Machine -- 3.3 AlexNet  
-- 4 Conclusion and Discussions -- References -- Covid Analysis  
Prediction Using Densenet Method in Deep Learning -- 1 Introduction  
-- 2 Related Work -- 3 Methodologies -- 3.1 DenseNet -- 4 Proposed  
Work -- 4.1 Need for Covid Detecton -- 4.2 Dataset -- 4.3 Server  
Creaton -- 4.4 Identfcation of Covid -- 4.5 System Architecture -- 5  
Implementation and Results -- 6 Conclusion and Future Enhancement  
-- References -- Feature Extraction Based on GLCM and GLRM Methods  
on COVID-19 Dataset -- 1 Introduction -- 2 Literature Review -- 3  
Proposed Methodology -- 3.1 Feature Extraction -- 3.2 Gray Level Co-

Occurrence Matrixes -- 3.3 Gray Level Run Length Matrix -- 4  
Classification Techniques -- 5 Results and Discussion -- 5.1  
Performance Measures Parameters -- 6 Conclusion -- References.  
Memory Augmented Distributed Monte Carlo Tree Search Algorithm-  
Based Content Popularity Aware Content Recommendation Using  
Content Centric Networks.

---