1. Record Nr. UNINA9910751394403321

Autore	Roy Satyabrata
Titolo	Innovations in Computational Intelligence and Computer Vision : Proceedings of ICICV 2022
Pubbl/distr/stampa	Singapore : , : Springer, , 2023 ©2023
ISBN	9789819926022
Edizione	[1st ed.]
Descrizione fisica	1 online resource (764 pages)
Collana	Lecture Notes in Networks and Systems Series ; ; v.680
Altri autori (Persone)	SinwarDeepak DeyNilanjan PerumalThinagaran TavaresJoão Manuel R. S
Disciplina	006.3
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Organizing Committee -- Preface -- Contents -- Editors and Contributors -- Empirical Study of Multi-class Weed Classification Using Deep Learning Network Through Transfer Learning -- 1 Introduction -- 2 Related Work -- 3 Data Preparation and Methodology -- 3.1 Dataset Used -- 3.2 Preprocessing -- 4 Materials and Methods -- 4.1 Convolutional Neural Network (CNN) -- 4.2 Transfer Learning -- 5 Experimental Results -- 6 Conclusion and Future Work -- References -- Secured Face Recognition System Based on Blockchain with Machine Learning -- 1 Introduction -- 2 Literature Review -- 3 Proposed Work -- 3.1 Pixel to Blocks -- 3.2 Face Recognition -- 4 Experiments -- 5 Conclusion -- References -- Classifying Paintings/Artworks Using Deep Learning Techniques -- 1 Introduction -- 2 Literature Review -- 2.1 Motivation -- 3 Methodologies -- 3.1 Dataset -- 3.2 Model Building -- 3.3 Model Testing -- 4 Results -- 5 Conclusion -- References -- Hybrid Deep Face Music Recommendation Using Emotions -- 1 Introduction -- 2 Related Works -- 3 Proposed Method -- 3.1 Data Collection -- 3.2 Methodology -- 3.3 Algorithm -- 4 Experimental Results and Analysis -- 4.1 Results -- 4.2 Conclusion -- 4.3 Future Scope -- References -- Integrating ResNet18 and YOLOv4

for Pedestrian Detection -- 1 Introducton -- 2 Related Works -- 3 Proposed System -- 3.1 Input -- 3.2 Backbone (ResNet18) -- 3.3 Neck -- 4 Experiments and Discussion -- 5 Conclusions -- References -- Image Restoration from Weather Degraded Images Using Markov Random Field -- 1 Introduction -- 2 Literature Survey -- 3 Background -- 4 Proposed Methodology -- 5 Experimental Results -- 6 Conclusion and Future Work -- References -- A Feature Representation Technique for Angular Margin Loss -- 1 Introduction -- 2 Background -- 3 Proposed Technique -- 3.1 Feature Representation as a Signal. 3.2 Feature Similarity Functions -- 4 Experiment and Result -- 4.1 Experiment Setup -- 4.2 Result -- 5 Conclusion -- References -- LeafViT: Vision Transformers-Based Leaf Disease Detection -- 1 Introduction -- 2 Related Work -- 2.1 Shape and Texture-Based Leaf Disease Identification -- 2.2 Deep Learning-Based Leaf Disease Detection -- 2.3 Fine-Grained Visual Categorization (FGVC) -- 2.4 Transformers Models in Computer Vision -- 3 Proposed Method -- 3.1 Model Architecture -- 3.2 Loss Function -- 3.3 Class Imbalance -- 4 Implementation -- 4.1 Dataset -- 4.2 Hyperparameters -- 5 Experiments -- 5.1 Ablation Studies -- 5.2 Evaluation Metrics -- 6 Conclusion -- References -- Conversion of Satellite Images to Google Maps Using GAN -- 1 Introduction -- 2 Related Work -- 2.1 Problem Definition -- 2.2 Dataset -- 3 Methodology -- 3.1 U-Net -- 3.2 CycleGAN U-Net -- 3.3 W-Net -- 3.4 CycleGAN W-Net -- 3.5 Experiments -- 3.6 Metrics -- 4 Analysis -- 4.1 Two Sample Z-Test and Objectives of Results -- 4.2 Road, Water, and Forest Dataset -- 5 Results -- 6 Conclusion + Future Scope -- References -- Investigation of Widely Used Implicit and Explicit Communication in Crossing-Decision of Pedestrian in UAE -- 1 Introduction -- 2 Literature Review -- 3 Method -- 4 Result -- 4.1 At Unsignalized Pedestrian Crossing -- 4.2 Signalized Crossing or Pelican Crossing -- 4.3 Mid-road Crossing -- 4.4 Unsignalized T-Junctions Crossing -- 4.5 Residential Area Crossing -- 5 Discussion -- 6 Conclusion -- References -- Attention Deficit Hyperactivity Disorder Prediction Using Resting-State Networks -- 1 Introduction -- 2 Related Work -- 3 Methodology -- 3.1 Data Gathering and Cleaning -- 3.2 Data Preprocessing and Feature Extraction -- 3.3 Model Selection and Planning -- 4 Results -- 4.1 Testing Hypotheses -- 4.2 ROC Curve -- 5 Conclusion -- References. Neuroinformatics Deep Learning Synthesizer Based on Impulse Control Disorder Using LSTM Cells -- 1 Introduction -- 2 Using Deep Learning Capabilities for Diagnosis of the Disease -- 3 Methodology and System Description -- 4 Data Preparation and Results-Based Orientation -- 5 Data-Set Description -- 6 Baseline Models -- 7 Results -- 8 Conclusion -- References -- Wasserstein GANs-Enabled Spectral Normalization on Credit Card Fraud Detection -- 1 Introduction -- 2 Background -- 3 Proposed Method -- 3.1 Undersampling -- 3.2 Oversampling -- 3.3 Generative Adversarial Nets/Conditional -- 3.4 Wasserstein GANs -- 3.5 Batch Normalization -- 3.6 Spectral Normalization -- 3.7 L1 Loss -- 3.8 Metrics -- 4 Experiments -- 4.1 Data -- 4.2 Classification Model -- 4.3 Model Parameters -- 5 Observation -- 6 Conclusion -- References -- Classification of Bipolar Disorder Using Deep Learning Models on fMRI Data -- 1 Introduction -- 2 Methodology -- 2.1 Preprocessing (FuNP) -- 2.2 Feature Extraction (ICA) -- 2.3 Feature Selection (T-Score Approach) -- 2.4 Model Training (ANN and LSTM) -- 3 Results -- 4 Conclusion -- References -- Predicting Schizophrenia from fMRI Using Deep Learning -- 1 Introduction -- 2 Methodology -- 2.1 Data Preprocessing and Analysis -- 2.2 Model Training -- 3 Results -- 4 Conclusions -- References -- Patrolling Robot with Facial Detection -- 1 Introduction -- 2 Literature Review -- 3 Related Work --

3.1 Haar Cascade Classifier -- 3.2 MediaPipe by Google -- 4 Methodology -- 4.1 Hardware -- 4.2 Software -- 5 Results and Discussion -- 6 Conclusion -- References -- A Graph-Based Relook Beyond Metadata for Music Recommendation -- 1 Introduction -- 2 Related Work -- 2.1 Representation Learning for Users -- 2.2 Representation Learning for Music -- 2.3 Recommendation Models -- 3 Dataset -- 4 Recommendation Models -- 5 Proposed Methodology. 6 Results and Analysis -- 6.1 Analysis of Results -- 7 Conclusion and Future Work -- References -- An Interpretability Assisted Empirical Study of Affective Traits in Visual Content of Disinformation -- 1 Introduction -- 2 Related Work -- 2.1 Visual Emotion in Disinformation Campaigns -- 2.2 Detection of Visual Emotion in Contexts -- 2.3 Interpretability Techniques for Visual Emotion Detection Models -- 3 Methodology -- 4 Dataset -- 5 Results and Discussions -- 5.1 RQ1: Do Visual Emotions Enhance the Message in a Disinformation Campaign? -- 5.2 RQ2: Do the Predominant Emotions Differ in Different Types of Disinformation Campaigns? -- 5.3 RQ3: To What Extent, the Emotional Theme Is Consistent or Event Specific Across Events of a Specific Disinformation Type? -- 6 Summary and Future Work -- References -- Multi-scale Fusion-Based Object Detection Network for Advance Driver Assistance Systems -- 1 Introduction -- 2 Related Work -- 2.1 Stage-1 Detectors -- 2.2 Stage 2-Detectors -- 3 Proposed Work-Multi-scale Fusion-Based Detection Architecture -- 3.1 Multi-scale Fusion-Based Object Detection Architecture -- 3.2 Dimensional Scaling -- 3.3 Multi-scaling -- 4 BiFPN -- 4.1 Inter-scale Links -- 4.2 Feature Fusion with Weights -- 5 System for Box/Class Estimation -- 6 Hyperparameters -- 7 Salient Features of Proposed Methodology -- 8 Experimental Results -- 9 Conclusion -- References -- Vectorization of Python Programs Using Recursive LSTM Autoencoders -- 1 Introduction -- 2 Literature Survey -- 2.1 Existing Systems -- 2.2 Background -- 3 Autoencoder Architecture -- 3.1 Encoder Architecture -- 3.2 Decoder Architecture -- 4 Dataset -- 5 Methodology -- 6 Results and Discussion -- 7 Conclusion -- References -- Phenology Detection for Croplands Using Sentinel-2 and Computer Vision Techniques -- 1 Introduction -- 2 Implementation and Experiments. 2.1 Autodetection of Farms from Geosatellite Images Using Computer Vision and Deep Learning -- 2.2 Fetching Image Data of Farms from Sentinel-2 and Processing It to Obtain the Time-Series NDVI Values -- 2.3 Denoising Raw NDVI Data -- 2.4 Interpolation of Mean NDVI Data -- 3 The Phenology Algorithm -- 3.1 The Start of Season (SOS) -- 3.2 The Peak of Season (POS) -- 3.3 The End of Season (EOS) -- 3.4 The Valley of Season (VOS) -- 3.5 Length of Season (LOS) -- 3.6 The Computation of Phenology Phases -- 4 Results and Discussion -- 5 Conclusion -- References -- Deep Learning-Based Safety Assurance of Construction Workers: Real-Time Safety Kit Detection -- 1 Introduction -- 2 Related Work -- 2.1 Based on Sensors -- 2.2 Based on Vision -- 3 Methodology -- 3.1 YOLO Detector -- 3.2 YOLO v5 and YOLO v6 -- 4 Dataset Preparation-HVM Dataset -- 4.1 Data Augmentation and Preprocessing Techniques -- 5 Validation Metrics -- 6 Results and Discussion -- 7 Conclusion -- References -- Automatic Detection and Classification of Melanoma Using the Combination of CNN and SVM -- 1 Introduction -- 2 Materials and Method -- 2.1 Images Used -- 2.2 Pre-processing -- 2.3 Feature Extraction -- 2.4 Classification -- 3 Results and Discussion -- 4 Conclusions -- References -- CyINSAT: Cyclone Dataset from Indian National Satellite for Forecasting -- 1 Introduction -- 2 Cyclone Dataset from Indian National Satellite -- 2.1 Properties -- 2.2 Construction -- 2.3 Related Datasets -- 3 Applications -- 3.1 Forecasting Parameters -- 3.2

Cyclone Track Forecasting -- 4 Conclusion -- References -- Classification of Ocular Diseases: A Vision Transformer-Based Approach -- 1 Introduction -- 2 Related Works -- 3 Methodology -- 3.1 Data -- 3.2 Vision Transformer -- 3.3 Training Phase -- 3.4 Optimizer -- 3.5 Regularization -- 4 Results -- 4.1 Learning Curves -- 4.2 Performance Metrics.
5 Conclusion.