

S.NO	PROJECT TITLES	DOMAIN	Existing Algorithms	Proposed Algorithms	Extension Algorithms
1	Embryo Classification using Microscopic Images	DL	ML algos	CNN	----
2	A Novel Hybrid Model to Predict Dissolved Oxygen for Efficient Water Quality in Intensive Aquaculture	DL	LSTM, GRU	LightGBM-BISRU-Attention	Ensemble LightGBM-BISRU-Attention
3	A Deep Learning-Based Experiment on Forest Wildfire Detection in Machine Vision Course	DL	SVM	VGG16	VGG19
4	Creating Alert Messages Based on Wild Animal Activity Detection Using Hybrid Deep Neural Networks	DL	CNN	VGG19 + BI-LSTM	CNN + GRU
5	Autonomous landing scene recognition based on transfer learning for drones	DL	ResNet50	ResNext50 + CNN and ADAM optimizers	ResNet50 + Random Forest Hybrid Model
6	Wild Bird Species Identification Based on a Lightweight Model with Frequency Dynamic Convolution	DL	CNN	MobileNetV3	ResNet50 + hybrid ensemble random forest
7	CNN-LSTM Driving Style Classification Model Based on Driver Operation Time Series Data	DL	CNN	CNN + LSTM	CNN + LSTM + BI-LSTM
8	Diagnosis of Alzheimer's Disease Using Convolutional Neural Network with Select Slices by Landmark on Hippocampus in MRI Images	DL	Resnet50	LeNet	LeNet with Dropout
9	Tongue Colour Classification in TCM with Noisy Labels via Confident-Learning-Assisted Knowledge Distillation	DL	VGG16	E-CA2-ResNet18	E-CA2-ResNet18-Random Forest
10	Solar Cell Surface Defect Detection Based on Optimized YOLOv5	DL	Faster-RCNN	YoloV5	YoloV6

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11	Night time Pedestrian Detection Based on a Fusion of Visual Information and Millimeter-Wave Radar	DL	Faster-RCNN	YoloV5	YoloV6
12	3D-CNN and Autoencoder-Based Gas Detection in Hyperspectral Images	DL	Encoder	3DCNN Encoder Decoder	Ensemble CNN + Bidirectional + GRU
13	Human Behaviour Recognition Based on Multiscale Convolutional Neural Network	DL	CNN2D	MDN CNN3D	Hybrid CNN + Bidirectional + GRU
14	Stacked Autoencoder-Based Intrusion Detection System to Combat Financial Fraudulent.	DL	DNN	Auto-Encoder DNN	CNN, CNN+LSTM
15	Data Balancing and CNN based Network Intrusion Detection System.	DL	CNN- ADASYN	CNN	CNN+LSTM
16	DeepSkin A Deep Learning Approach for Skin Cancer Classification	DL	CNN	ResNet50	Xception
17	Model Selection of Hybrid Feature Fusion for Coffee Leaf Disease Classification	DL	ResNet50	CNN + VAE + SWIN	Xception
18	FieldPlant A Dataset of Field Plant Images for Plant Disease Detection and Classification with Deep Learning	DL	DenseNet201, VGG16	InceptionV3	Xception
19	Detection of Apple Plant Diseases Using Leaf Images Through Convolutional Neural Network	DL	VGG16	CNN	DenseNet201
20	Pest Detection and Classification in Peanut Crops Using CNN, MFO, and EVITA Algorithms	DL	ResNet	MFO-ResNet	Xception
21	PiTLiD_ Identification of Plant Disease from Leaf Images Based on Convolutional Neural Network	DL	CNN -LeNet	InceptionV3	Xception

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22	DeepCurvMRI_ Deep Convolutional Curvelet Transform-Based MRI Approach for Early Detection of Alzheimer's Disease	DL	SVM	CNN - DeepCurMRI	Xception
23	Cyberbullying Detection Based on Emotion	DL	XLNet	EDM + BERT	LSTM+GRU
24	A Stock Price Prediction Model Based on Investor Sentiment and Optimized Deep Learning	DL	MLP	MS-SSA-LSTM	LSTM-GRU
25	Lung-RetinaNet_ Lung Cancer Detection Using a RetinaNet with Multi-Scale Feature Fusion and Context Module	DL	VGG16	RetinaNet	Xception
26	WildFishNet: Open Set Wild Fish Recognition Deep Neural Network with Fusion Activation Pattern	DL	ResNet50, MobileNetV2	WilFishNet	WildFishNet Batch Normalization
27	Monkeypox Diagnosis with Interpretable Deep Learning	DL	VGG16, ResNet50	MobileNetV2	Hybrid MobileNetV2
28	Printed Circuit Board Defect Detection Methods Based on Image Processing, Machine Learning and Deep Learning_ A Survey	DL	SSD	Yolov5s	Yolov5x
29	Flame and Smoke Detection Algorithm Based on ODConvBS-YOLOv5s	DL	SSD	Yolov5s	Yolov5x
30	Multi-Class Retinal Diseases Detection Using Deep CNN With Minimal Memory Consumption	DL	SVM	DEEP CNN	Xception
31	KianNet A Violence Detection Model Using an Attention-Based CNN-LSTM Structure	DL			
32	Lumbar Disease Classification Using an Involutional Neural Based VGG Nets INVGG	DL			

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33	A Novel Deep Learning Architecture Optimization for Multiclass Classification of Alzheimer's Disease Level	DL			
34	A Reliable and Robust Deep Learning Model for Effective Recyclable Waste Classification	DL			
35	Facial Emotion Recognition FER Through Custom Lightweight CNN Model Performance Evaluation in Public Datasets	DL			
36	Fine-Tuning of Predictive Models CNN-LSTM and CONV-LSTM for Nowcasting PM2.5 Level	DL			
37	Predicting Credibility of Online Reviews an Integrated Approach	DL			
38	Prediction of Course Grades in Computer Science Higher Education Program via a Combination of Loss Functions in LSTM Model	DL			
39	Text Sentiment Analysis of Douban Film Short Comments Based on BERT-CNN-BiLSTM-Att Model	DL			
40	SPCM A Machine Learning Approach for Sentiment-Based Stock Recommendation System	DL			
41	ChurnNet Deep Learning Enhanced Customer Churn Prediction in Telecommunication Industry	DL			
42	A Novel Transfer Learning Framework for Multimodal Skin Lesion Analysis	DL			
43	YARS-IDS_ A Novel IDS For Multi-Class Classification.	ML & DL	Adaboost	CNN	Voting Classifier

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44	Deep Learning in Cervical Cancer Diagnosis Architecture, Opportunities, and Open Research Challenges	ML & DL	KNN, DT	CNN	Yolo