ML-DL (PYTHON)

CODE	TITLE	DESCRIPTION
VTPML01	Intelligent Detection Designs of HTML URL Phishing Attacks	HTML URL phishing attacks involve algorithms that analyze URLs for suspicious patterns or deviations from legitimate structures to identify potential phishing attempts
VTPML02	The Role of Machine Learning in Identifying Students At-Risk and Minimizing Failure	Machine learning identifies at-risk students by analyzing academic patterns and behaviors, aiding in targeted interventions to minimize failure rates and improve academic outcomes
VTPML03	Color Image Edge Detection Method Based on the Improved Whale Optimization Algorithm	This method enhances edge detection in color images using a refined version of the Whale Optimization Algorithm, optimizing the process to identify and highlight image edges with improved accuracy and efficiency
VTPML04	Travel Mode Choice Prediction Using Imbalanced Machine Learning	This approach employs machine learning to predict travel mode choices while addressing imbalanced data issues, aiming to improve accuracy in predicting less frequent transportation choices
VTPML05	A Static Machine Learning Based Evaluation Method for Usability and Security Analysis in E-Commerce Website	This proposed method leverages static machine learning techniques to assess usability and security aspects of e-commerce websites
VTPML06	Electric Vehicles Charging Sessions Classification Technique for Optimized Battery Charge Based on Machine Learning	EV charging by identifying different charging session types and tailoring the charging strategy to optimize battery health, minimize charging costs, and suit user preferences or operational requirements. Additionally, integrating real-time data and feedback loops can enhance the model's ability to adapt to changing conditions and improve its charging recommendations over time.
VTPML07	Music Genre Classification using Machine Learning	Find Music Genre classification from .wav music file input with 9 types using custom MLP
VTPML08	Automated Stroke Prediction Using Machine Learning	Brain stroke prediction from user health status input using XGBoost and a fusion of XGBoost with Random Forest
VTPML09	Multi-Sensor-Based Action Monitoring and Recognition via Hybrid Descriptors and Logistic Regression	Activity Prediction from wearable sensors based input file data with 12 types using KNN & Random Forest with GridSearchCV

IEEE 2023 - MACHINE LEARNING

Contact: +91 95810 22022, +91 95810 12012
Email: raminnovativeinfotech@gmail.com, www.raminnovativeinfotech.webs.com

1

CODE	TITLE	DESCRIPTION
VTPML10	Co2 Emission Rating by Vehicles Using Data Science	Finding out the CO2 (carbon dioxide) emission ratings of the vehicles so we are going to implement Random forest classifier and Decision tree classifier
VTPML11	Fake Profile Detection on Social Networking Websites using Machine Learning	People come to social networking sites to spend their time for various reasons but some of the fake users will be creating some fake accounts to sell some products or cheat some people. Using Random forest classifier and Decision tree classifier for detection of fake users in social networking website data of Instagram
VTPML12	Crime Prediction Using Machine Learning and Deep Learning	The crime prediction using Decision tree classifier & Bagging classifier with crime forecasting and categorization with the Indian & Chicago data set with 20 classes
VTPML13	Drug Recommendation System in Medical Emergencies using Machine Learning	Use the internet to find the medical suggestion But if you are using a wrong meditation system or wrong drug it may affect the health and also it is dangerous to the human life. So Using Random forest classifier and Decision tree classifier for recommendation of Drugs with 10 distinct classes
VTPML14	Efficient Machine Learning Algorithm for Future Gold Price Prediction	Note this is only a prototype. Gold is used for the jewelry purpose and also for the investment purpose. So Random Forest regression to find the gold price for our specified dataset
VTPML15	House Price Prediction using Machine Learning Algorithm	Using Random Forest regression to find the value of the house price prediction from our trained dataset
VTPML16	Human Stress Detection Based on Sleeping Habits Using Machine Learning Algorithms	We are going to implement this in this to predict human stress is random forest classifier for five classes

IEEE 2023 – MACHINE LEARNING

ML-DL (PYTHON)

CODE	TITLE	DESCRIPTION
VTPDL01	A Machine Learning Based Framework for a Stage-Wise Classification of Date Palm White Scale Disease	Framework utilizes machine learning to categorize Date Palm White Scale disease in stages, enabling a step-by-step classification approach for accurate disease identification and management
VTPDL02	Urinary Stones Segmentation in Abdominal X-Ray Images Using Cascaded U-Net Pipeline with Stone-Embedding Augmentation and Lesion-Size Reweighting Approach	Integrating stone-embedding augmentation and lesion-size re-weighting methods, to segment urinary stones in abdominal X-ray images, enhancing accuracy and delineation of stone areas
VTPDL03	An AI Based Automatic Translator for Ancient Hieroglyphic Language — From Scanned Images to English Text	AI system translates ancient hieroglyphic language from scanned images into English text, using machine learning to recognize and interpret the symbols, enabling automated conversion for better understanding and analysis
VTPDL04	High-Resolution Semantically Consistent Image-to-Image Translation	Method enables high-resolution image translation while maintaining semantic consistency, ensuring that the translated image retains meaningful details and coherence despite the increase in resolution.
VTPDL05	A Fine-Grained Object Detection Model for Aerial Images Based on YOLOv5 Deep Neural Network	The paper describes implementation of a real-time visual tracking system equipped with an active camera
VTPDL06	Multiple Types of Cancer Classification Using CT/MRI Images Based on Learning Without Forgetting Powered Deep Learning Models	In this research, AI-based deep learning models are proposed to classify the images of kinds of cancer, such as lung, brain, breast, and cervical cancer
VTPDL07	Interpretable Deep Learning Framework for Land Use and Land Cover Classification in Remote Sensing Using SHAP	An interpretable deep learning framework for land use and land cover (LULC) classification in remote sensing using Shapley additive explanations (SHAPs) is introduced.
VTPDL08	Soil Surface Texture Classification Using RGB Images Acquired Under Uncontrolled Field Conditions	We propose a novel, scalable, and high spatial resolution soil surface texture classification process that employs image processing, texture-enhancing filters, and Convolutional Neural Network (CNN).
VTPDL09	Deep Learning Approach for Classifying the Built Year and Structure of Individual Buildings by Automatically Linking Street View Images and GIS Building Data	Approach for Classifying the Built Year and Structure of Individual Buildings by Automatically Linking Street View Images" proposes a cutting-edge method to use deep learning for determining both the construction year and structural type of individual buildings.

Contact: +91 95810 22022, +91 95810 12012
Email: raminnovativeinfotech@gmail.com, www.raminnovativeinfotech.webs.com

3

CODE	TITLE	DESCRIPTION
VTPDL10	Facial Age Estimation Models for Embedded Systems	It involves comparing various methods designed to estimate a person's age based on facial features. The research aims to assess the performance, efficiency, and suitability of these models for integration into devices with limited computational resources, such as embedded systems.
VTPDL11	Lightweight Efficient NetB3 Model Based on Depth wise Separable Convolutions for Enhancing Classification of Leukemia White Blood Cell Images	By utilizing this innovative approach, the research aims to develop a more resource-efficient version of the EfficientNetB3 model specifically tailored for the classification of leukemia-related white blood cell images
VTPDL12	Vision Transformer with Contrastive Learning for Remote Sensing Image Scene Classification	Various computer vision tasks by utilizing self-attention mechanisms to capture global dependencies within images. Meanwhile, contrastive learning techniques aim to learn representations by maximizing similarity between similar samples and minimizing similarity between dissimilar ones
VTPDL13	A High-Quality Rice Leaf Disease Image Data Augmentation Method Based on a Dual GAN	Using a Dual Generative Adversarial Network (GAN) to generate high-quality rice leaf disease images involves training two GANs simultaneously. One GAN generates synthetic diseased rice leaf images, while the other produces healthy rice leaf images. These generators create realistic images, guided by discriminators that differentiate between real and generated images
VTPDL14	Semi-supervised Bladder Tissue Classification in Multi-Domain Endoscopic Images	The task of semi-supervised bladder tissue classification in multi-domain endoscopic images involves categorizing different tissue types within the bladder using a combination of labeled and unlabeled data across various imaging domains.
VTPDL15	Space Object Recognition with Stacking of CoAtNets Using Fusion of RGB and Depth Images	CoAtNets (Convolutional Attention Networks) for analyzing both RGB and depth images offers a sophisticated approach. RGB images capture visual information, while depth data provides insights into spatial aspects. Combining these modalities involves employing CoAtNets, which are adept at capturing spatial relationships through self-attention mechanisms.
VTPDL16	A Smoking Detection Algorithm Based on Improved YOLOV5	Smoking person detection from input image using MobileNetV2
VTPDL17	Smart Edge-Based Driver Drowsiness Detection in Mobile Crowd sourcing	Driver sleeping behavior detection from eyes and mouth pixel points detection from our input using CNN
VTPDL18	A Hybrid Method of Feature Extraction for Signatures Verification Using CNN and HOG a Multi-Classification Approach	Signature detection for user verification for identification of existing user's or not using CNN and HOG

IEEE 2023 - DEEP LEARNING

Contact: +91 95810 22022, +91 95810 12012
Email: raminnovativeinfotech@gmail.com, www.raminnovativeinfotech.webs.com

4

ML-DL (PYTHON)

CODE	TITLE	DESCRIPTION
VTPDL19	Blood Cancer Identification using Hybrid Ensemble Deep Learning Technique	Blood cancer detection through blood cell's image input for 4 types using MobileNetV2
VTPDL20	Detection and Identification of Pills using Machine Learning Models	Detect medicines for patients is a crucial step to achieve that we are using MobileNet to detect what kind of medicine for 20 categories through medicine as a image input
VTPDL21	Development of Hybrid Image Caption Generation Method using Deep Learning	Image captioning is a process of generating a descriptive sentence for the given image in a human understandable language in a sentence. we are going to use deep learning model based on our proposed model as RESNET 50 architecture and LSTM
VTPDL22	Digital Image Forgery Detection Using Deep Learning	All the images are not authentic so there are many forged images also forged means that is tamper they have modified the images of the original image so finding the digital forgery detection we are going to used CNN model architecture
VTPDL23	Image-Based Bird Species Identification Using Machine Learning	Birds will be migrating from one place to another, identifying which kind of birds are migrating so that we can able to know the characteristics of the particular bird species using random forest model for 200 species
VTPDL24	Medicinal Herbs Identification	Herbs or the medicinal plants are very helpful for the medicational purpose for the human beings and especially in the type of medicine called ayurveda. Identifying the herbs of 30 different plant species using Xception architecture model
VTPDL25	Monkeypox Diagnosis with Interpretable Deep Learning	Resnet 50 V2 architecture is going to predict about the monkey box but the problem with this monkey box is that it is similar to the chicken box or some other kinds of diseases so, we have used is monkeypox skin relation data set
VTPDL26	Pancreatic Cancer Classification using Deep Learning	Two models in the machine learning part like random forest classifier and navy bayes and also one model for the the Deep learning part like CNN and also we going to use numerical data set and also the image data set to Detect Pancreatic Cancer
VTPDL27	Traffic Sign Classification using Deep Learning	Two separate techniques like MobileNet & YoloV5 has been used to find out Traffic sign detection using image input as well as with live cam

IEEE 2023 - DEEP LEARNING