# ACCELERATION OF THE PROCESS OF RECOGNITION AND HEALTH MANAGEMENT FOR COVID-19 DETECTION BY AI-BASED PLATFORMS

**Anand B [a], Ajmeera Kiran[b],**

[a]*Department of Computer Science and Engineering, MLR Institute of Technology, Hyderabad, India*
[b]*Department of Computer Science and Engineering, MLR Institute of Technology, Hyderabad, India*

***Abstract*** *- The COVID-19 epidemic had placed the entire world in a precarious condition that had never been seen before, terrifyingly putting a stop to life everywhere in the world, and taking the lives of thousands or more people. It is still a threat to everyone's health despite the fact that COVID-19 has spread throughout multiple countries and territories, there has been a significant increase in the number of infected people, and the number of deaths has risen to 6 lakhs and 3 lakhs and counting (as of the present day). This article presents a way out of the virus through a variety of artificial intelligence (AI) techniques, with a few more deep learning (DL) methods taken into consideration to achieve the required goals. These techniques include recarting Recurrent Neural Networks (RNNs), and long short-term memory (LSTM). It also includes an integrated manner to construct a bio-informatics approach, in which different information from a spectrum of data sources is brought together and blended to produce platforms that are simple to run for a variety of consumers. The prevalence of platforms that are enabled with AI is intended to facilitate the acceleration of the process of identifying and treating COVID-19. In addition, it offers platform-specific inputs, such as various medical data and photographs, which can help enhance the purpose of the existing approaches, which is to achieve the finest answers possible in real-world situations.*

***Keywords--*** *Artificial intelligence, machine learning, Deep learning, Biomedical informatics, COVID-19, Bioinformatics, Diagnosis, Big data, treatment.*

# AN INTELLIGENT ENCODING WATERMARKING TECHNIQUE ON IMAGE TRANSMISSION USING DEEP LEARNING MODEL: WASSERSTEIN GENERATIVE ADVERSARIAL NETWORK (WGAN)

Mrs. Shaik Salma Begum [1] , Dr. Adilakshmi Yannam [2]

1. Assistant Professor, Seshadri Rao Gudlavalleru Engineering College

2. Associate Professor, Seshadri Rao Gudlavalleru Engineering College

## Abstract:

Data hiding is the method involved with implanting data into a commotion open minded sign like a piece of sound, video, or picture. Computerized watermarking is a type of information stowing away where recognizing information is powerfully implanted so, that it can oppose altering and be utilized to distinguish the first proprietors of the media. Steganography, another type of information stowing away, inserts information with the end goal of secure and secret correspondence. A DNN model is proposed for Digital watermarking which explore the licensed innovation of Deep Neural Network, watermarks embedding, and proprietor check. This prototype can produce the marks to manage potential assaults (adjusting and prepare to insert). This proposed approach is tried on various standard datasets. The customary data stowing away is acknowledged by implanting the privileged data into the sight and sound, however it will definitely leave the change mark in the transporter. This paper proposed another strategy for coverless data stowing away. In the first place, the superior Wasserstein GAN (WGAN-GP) model is built, and the prototype is prepared with camouflaged pictures as well as secret pictures.

# MACHINE LEARNING FRAMEWORK TO DETECT LUNG CANCER

Dr. K.S.R. Radhika[1], L.Sai Ganesh[2], M.Harish[2], K.Pavankanth[2], K.Sai Kiran Reddy[2]

[1] Professor at the TKR Institute of Engineering & Technology's Department of Computer Science and Engineering

[2] Graduate Student, Department of Computer Science and Engineering, TKR College of Engineering & Technology

**ABSTRACT:** Lung cancer diagnoses are increasing year by year, making it more important than ever to identify the condition and offer efficient medical care. Lung cancer is detected using images from a low-dose CT scan. The LUNA16 data contains eight hundred and eighty eight CT scans that have been labeled with nodules. The annotation displays the lung nodules' coordinates. The knot is in the heart of a cube that comprises the nodules. Using a 3D convolution neural network, these cubes are utilized to find nodules (CNN). Lung cancer is diagnosed through data from the Data Science Bowl 2017 Kaggle competition. There have been 1595 CT scans globally. Based on this information, nodular detection is used to forecast the development of lung nodules. In all, there must have been 1595 CT scans. Based on this information, the nodule detector, which operates on the CT scans as grids, forecasts the occurrence of lung nodules. A pulmonary ROI mask is generated through image analysis of the CT image. A second 3D CNN is used to forecast cancer based on the predicted nodule coordinates, which would then be intended to produce cubes surrounding nodules being the same size as before.

**Keywords**: CT Scan images, detection, Convolution Neural Network (CNN), ROI mask

# A SMART DEEP LEARNING BASED MEDICINE RECOMMENDATION SYSTEMS

Ch. B.V. Durga, T Sushma Priya, Ch. Indu
Department of Computer Science & Engineering
PSCMR College of Engineering & Technology, Vijaywada-1, A.P., India

## ABSTRACT

People today are becoming increasingly concerned about their health and issues related to medical diagnostics. On the other hand, a report from the administration claims that more than 1 crore people per year pass away as a result of prescription mistakes made by inexperienced doctors. As a result of their insufficient experience, doctors are to blame for more than 42% of drug errors since they write prescriptions that aren't accurate. Natural language processing is a broad field of technology that has the potential to alter the way things are currently. The study of language processing is what it is. It deals with the use of computer algorithms to recognise essential components of spoken and written language and to derive meaning from unstructured data. The selection of a suitable drug for the patient might be helped by medication recommendation systems for healthcare professionals. These recommendation systems could result in more succinct conclusions if they were developed with the aid of today's cutting-edge technologies. Different algorithms have been used to construct many of the current medicine recommendation systems.

**KeyWords**: Natural language processing, cutting-edge technologies, recommendation system, succinct, unstructured

# Artificial Intelligence-Based Rock-Paper-Scissors

Ajmeera Kiran[a], P.Purushotham[b]

[a]*Department of Computer Science and Engineering, MLR Institute of Technology, Hyderabad, India*

[b]*Department of Computer Science and Engineering, MLR Institute of Technology, Hyderabad, India*

*Abstract*— Artificial Intelligence-based Rock-Paper-Scissors (RPS) is a hand gesture recognition game that can be played interactively between a computer and a person by utilizing a webcam. Players compete against each other to see who can score the most points. One of the players in the classic game of rock-paper-scissors is a person, while the other player is a machine. During each round, the camera receives input from the player as well as the machine's AI. This information is then processed by a convolutional neural network (CNN), and finally, both the player's and the machine's input hand gestures are compared with the actual datasets that were used to train the machine in the earlier rounds. The total points from each round are added up to produce the final outcome, which will either be a winner, a loser, or a draw. The gameplay is built on Artificial Intelligence, a technology that is considered to be of the future. In this, we will be use a method known as CNN, which stands for convolutional neural network. This method is trained using a dataset that includes rock-paper-scissors hand gestures and nothing motions performed by a variety of people. It provides a speedy and productive computer-vision architecture for maintaining a consistent game experience. We implement our tactics to collect a wide collection of training datasets and evaluate the efficacy of these strategies in order to acquire accurate results, which makes our application more powerful and also makes playing the game more entertaining and fascinating.

**Keywords**- Hand gesture; Interactively; CNN; webcam; Dataset; Computer Vision;

# SPEECH EMOTION RECOGNITION USING CONVOLUTIONAL NEURAL NETWORKS

Degala Divya Priya [a], P Purushotham[b]

[a]*Department of Computer Science and Engineering, MLR Institute of Technology, Hyderabad, India*

[b]*Department of Computer Science and Engineering, MLR Institute of Technology, Hyderabad, India*

## Abstract

*The human voice may transmit many emotions. Speech emotion reveals human behaviour. We can better understand people's motivations by digging deeper, whether they're unhappy customers or excited fans. Emotion recognition by machine learning is still a work in progress. In our proposed study, we analyse speaker-differentiated sound waveforms to discern speakers' emotions. This voice emotion detection system employs the CNN algorithm to recognise and classify emotions such as delighted, surprised, angry, neutral, sad, etc. LIBROSA is used to acquire features from voice samples for the speech emotion recognition system's dataset. Categorization uses extracted features. This article seeks to recognise deep speech features for emotion recognition with less learnable parameters. We presented a basic CNN architecture based on segmented log-mel-spectrograms. The suggested architecture extracts emotion-related information from two voice emotion recognition databases.*

*Keywords : CNN, Librosa*

# A HYBRID BLENDED ENSEMBLE MODEL FOR MICROSOFT STOCK PRICES PREDICTION

Kiran Konda[1], Billa Sravana Kumari[2]
[1]Technology Lead, Wells Fargo India Solutions, Hyderabad, Telangana
[2]Student, CSE, PSCMRCET, Vijayawada, Andhra Pradesh
kiran.k.konda@gmail.com

**Abstract:**
The stock exchange could be a volatile, complicated, and dynamic money market. For academics, foretelling future stock values is a supply of concern and contention. Several researchers have experimented with a wide variety of approaches to victimization basic Machine Learning and Neural Networks, starting from easy regression to complicated neural networks. During this model, we are going to provide a system to predict the stocks that mix functions in mathematics, machine learning, and some other factors to boost stock forecast to produce accurate results. That results will make profitable trades. As a result, they'll store previous knowledge, LSTMs (Long-Short-Term Memory) are extraordinarily effective in a series of prediction issues. This is often vital in our instance since a stock's former worth is important to determine its future price. The system predicts a stock over a day while also anticipating the stock's actual price.

**Keywords:** LSTM, Keras, Machine Learning, Deep Learning, Stocks, Epochs, Blending, Drop, Neural networks.

# PERCEPTION OF PSYCHOLOGICAL INSTABILITY USING RANDOM FOREST ALGORITHM

[1]Dr.Pradeep K G M ,[2]Dr.Umesha G B

[1] Associate Professor , Department of ECE , Shridevi Institute of Engineering and Technology, Tumkur , Karnataka

[2] , Associate Professor , Department of ECE , Shridevi Institute of Engineering and Technology , Tumkur, Karnataka

Pkgm777@gmail.com, umeshagb@gmail.com

## ABSTRACT

Mental health difficulties such as depression, anxiety, and sleep disorders can begin at a young age as a result of the mental stress that people face on a daily basis. More than 5 billion people in India suffer from the negative impacts of mental stress. According to a study conducted at the University of Melbourne, four out of every five children suffer from mental illnesses. Psychological well-being is essential for a child's development and academic achievement. We constructed a robust model utilising machine learning algorithms to evaluate the stress level of the people to tackle this problem and develop a cost-effective solution given the exorbitant counselling fees that cannot be afforded by everyone. To include this, we used questionnaires to obtain real-time survey data from people from diverse streams in various locations. To create the model that will predict stress, we employed the RFC learning method.

**KEYWORDS:** Mental disorder prediction, Random Forest, SVM, Depression, ML, DT, feature extraction, working employees

# SMART EDGE: CENTRALIZED HEALTHCARE REPOSITORY SYSTEM

P.Purushotham[a], Ajmeera Kiran[b],

[a]*Department of Computer Science and Engineering, MLR Institute of Technology, Hyderabad, India*
[b]*Department of Computer Science and Engineering, MLR Institute of Technology, Hyderabad, India*

## Abstract

Desegregating data and integrating artificial intelligence into medical sectors are two ways that technology has helped improve the efficacy of medical infrastructure and medical treatment. Therefore, the duty, scalability, and essentiality are all different challenges that will be a part of the belief in the coming next-part of the health care system. As a result of the exponential growth in the amount of human knowledge that is created, numerous health care systems are becoming ineffective as a result of the onslaught of information that they are forced to deal with. It is anticipated that more than one system will improve both the system's latency and its quantifiability. However, there are certain things to keep in mind when it comes to a few of these systems, and those things have to do with the fact that the required degrees of human participation gradually rise as the system becomes more powerful. Nevertheless, ML techniques are acquiring a lot of effort, and this work is carried out to address efficiently short processes with innovative estimations. We are enhancing the treating areas for the purpose of increasing health for the better execution of the procedure that needs to be done by utilising a few machine learning strategies such as CNN algorithms. Here are irregular heartbeats with ninety-one different victims using the SVM formula. In addition to this, we have a tendency to demonstrate that the proposed system is superior than conventional compartmentalization formulas. It is imperative that the signals be transmitted in order to continue the treatment for the patient's health, which is accomplished through the use of an electrocardiogram (ECG), in which each and every piece of data is saved with a distinct identity, which in turn makes it easier to carry out the tasks [1].

***Keywords:***ECG, scalability, machine learning technique, indexing, Deep learning, Smart Health Care..

# A COMPARATIVE STUDY ON MACHINE LEARNING AND DEEP LEARNING TECHNIQUES IN AGRICULTURE

Swathi Buragadda ,Sr. Assistant Professor,LBRCE Mylavaram,
buragaddaswathi@gmail.com

G.V.Rajya Lakshmi,Assistant professor,VRSEC,gvrlaxmi@gmail.com

## Abstract:

The processes that refers in Machine Learning (ML) that enable computer to think on various methods to learn. It can also called as domain, it is a subset of Artificial Intelligence. Here Deep learning (DL) have been giving a promising and new modern techniques to the data analysis in recent and upcoming years also. It is also showing the improved version of Artificial Neural Networks (ANN). Now-a-days it is the latest version of AI. As population in the world is increasing day by day and parallelly agriculture is also increasing, because of this reason researchers has focused in this issue and have tried to apply Machine learning and Deep leaning methods in Agriculture sector under the name of smart farm technologies to increase agriculture production and to resolve the challenges of agriculture.

# INTELLIGENT SHOPPING CART

D Divya Priya [a], Ajmeera Kiran[b],

[a]Department of Computer Science and Engineering, MLR Institute of Technology, Hyderabad, India

[b]Department of Computer Science and Engineering, MLR Institute of Technology, Hyderabad, India

## Abstract

Even though the technological revolution made it possible for people to live easier and more comfortable lives, there are still seemingly never-ending lines at checkout counters, where a significant proportion of customers are forced to wait in order to complete their purchases in retail stores. The existing billing system is always a time-consuming drama, and this holds true right from a local supermarket up to a sophisticated retail complex. The Internet of Things-based Intelligent Shopping Cart is being proposed as a solution to this problem of long billing queues. This shopping cart actually utilises Radio Frequency Identification (RFID) sensors, an Arduino-like regulator, Bluetooth module, and a Mobile application for the easy payment of bills. The two components, an RFID tag and an RFID reader, are assigned to each individual user. RFID tags serve as information storage centres, and RFID readers read that information. The essential components, including as the GSM module and the Zigbee technology, will carry out their assigned tasks in order to compute the bills, and the results will be displayed on the LCD display that is attached to the project kit. There is no doubt that the proposed framework has the potential to be effective in further enhancing the quality of life of people by saving the important time of those people.

# IMAGE TO TEXT CAPTION CONVERT TO VOICE MODULATION USING WITH DEEP LEARNING METHOD & SPEAKER RECOGNITION USING MEL FREQUENCY CEPSTRAL COEFFICIENTS (MFCC)

## Ajmeera Kiran[a] ,Divya priya[B]

[A]*Department of Computer Science and Engineering, MLR Institute of Technology, Hyderabad, India*
[B]*Department of Computer Science and Engineering, MLR Institute of Technology, Hyderabad, India*

**Abstract–** Image caption generators develop captions for the images they create. The image is the model's input, and the output is an English caption. This project uses computer vision and NLP to identify and caption photos. We're using the CNN and LSTM models for our picture caption generating project. This CNN model can recognise visual elements, and the LSTM model can construct the phrase, summarise the text, and create an appropriate caption. This project primarily generates subtitles for the photos we submit.

**Key Words**: Deep Learning, Convolutional Neural Network (CNN),Long Short Term Memory(LSTM),Computer Vision, Natural Language Processing (NLP), Input image, Feature extraction, Sentence generation. : Artificial Intelligence(AI), CNN,RNN

# RECOMMENDATION SYSTEM FOR INTENSE COMPASSION EVALUATION AND MULTI SOURCE VIEW FUSION THROUGHOUT SOCIAL NETWORKING SITES

Dr. K.S.R. Radhika[1], Pallerla Pranav [2], Pudari Keerthana [2], N.SaiAdarsh [2], MD.Mansoorkhan [2]

[1] Professor, Department of Computer Science and Engineering, TKR College of Engineering & Technology

[2] Graduate Student, Department of Computer Science and Engineering, TKR College of Engineering & Technology

**ABSTRACT**:

As digital data grows in volume, users' needs to find information become more complex. Most problems are solved by search engines, but there are some drawbacks that vary depending on the query that the user enters. The Recommendation is a solution for providing personal information by studying a user's interaction, user community, and previously recorded items. The use of content-based filtering to provide personalised recommendations based on the user's input. Whenever a user need recommendations on posts and books based on features, people takes the recommendation from friends, family etc. For books, the writer and genre are the main features. For posts, the features are keywords, genre, etc. It will give the details of the post. Independent of other people recommendations, we introduce a Telegram bot to provide recommendations based on various features for required recommendation. In this project, we use Count vectorizer and cosine similarity for the bot to recommend required recommend based on input. Count vectorizer counts the number of times a word is repeated and cosine similarity is used to get vector distance between post data set and input given by user. This project is tested using various user inputs and it recommends the required recommendations back to the user.

**Keywords:** Recommendations, bot, post, count victimizer.

# A smart way of Predicting Expenditure of Patient In Healthcare using Deep Learning Framework

Dr.Tumma Srinivasarao,

Gudlavalleru Engineering College,

srinivas123fast@gmail.com

Dr.M.Babu Rao,

Gudlavalleru Engineering College,

baburao.mpd@gmail.com

**Abstract:** As health concern is growing day by day due to change in life style and daily activities , always healthcare is a critical project with numerous applications, including firm profiling, capitated scientific pricing adjustment and responsible care management. Today strategies depend heavily on on linear regression and manually designed points, that requires a large amount of clinical data and limited predictive ability. Based on historical claims and surveys, the proposed system provides a Deep Learning framework system for predicting the maintenance of future medical expenses of each individual. Our deep learning technique is able to accurately model the heterogeneous data, which includes clinical codes, patient demographics, facility utilisation and medicine usages . Experiments have carried out on spending anticipating duties on an actual paediatric dataset with over 450,000 patient records. The outcomes prove that our proposed technique exceeds the criteria to anticipate medical expenditure. These results contribute to improve preventative and corrective heed in health maintenance.

**Index Terms:** Deep Learning, Administrative Claims Data, Expenditure Prediction , Digital fitness data, Machine Learning

# Automatic Skin Lesion Diagnosis: Comparative study

**Dondapati Rajendra Dev[#1], Dr. T. Sivaprakasam[#2], Dr.K.Vijaya Kumar [#3]**

[#1] *Research Scholar, Annamalai University, Annamalai Nagar, Tamil Nadu, India*
*Assistant Professor, Dept. of CSE, Vignan's Institute of Engineering for Women.*

[#2] *Guide, Assistant Professor, Dept of CSE, Annamalai University,*
*Annamalai Nagar, Tamil Nadu, India,*

[#3] *Co-Guide, Professor, Dept. of CSE, Gitam University*

## ABSTRACT

Using a comparative analytical technique, this paper examine and evaluate the current methods for automating melanoma skin lesion diagnosis processes, highlighting both their strengths and weaknesses. Decision-makers may benefit greatly from this exercise by weighing the relative importance of diagnostic accuracy and procedural complexity. To better understand the conventions followed, the assumptions made, the success documented, and the gaps that need to be suitably addressed by additional research into skin lesions, including malignant moles, we conducted a comparative examination of chosen literature from several publicly available digital libraries. The primary goals of this study are (1) to review the existing research efforts in response to the critical and challenging task of feature selection and extraction for skin cancer melanoma detection from dermoscopy images and (2) to discuss the conventional clinical methods for diagnosing melanoma. This study will also aid in establishing a historical context for the study of image processing methods for the diagnosis of melanoma in the skin. This document provides a comprehensive overview of the methods used to determine if a skin lesion is benign or malignant used for classifying the lesion in skin as benign and malignant.

**Key words:** Computer-assisted dermoscopy, Skin lesion segmentation, Melanoma skin disease, Classification