

# Human Body Parts Disease Detection Using Image Processing

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**Abstract:** Human Body Parts disease is a major health problem and it affects a large number of people. Human Body Parts disease is the leading cause of death in the modern world. Unless detected and treated at an early stage it will lead to illness and causes death. It is also helpful for conducting detailed study and investigations about the nature of the body parts. Content-based image retrieval (CBIR) is a technology that could aid medical diagnosis by retrieving and presenting earlier reported cases that are related to the one being diagnosed. To retrieve relevant cases, CBIR systems depend on super-vise learning to map low-level image contents to high-level diagnostic concepts. A new technique used that automatically learns the similarity between the several exams from textual distances extracted from radiology reports, there by successfully reducing the number of annotations needed. The method used first infers the relation between patients by using information retrieval techniques to determine the textual distances between patient radiology reports. These distances are used by metric learning algorithm that transforms the image space accordingly to textual distances. CBIR systems with different image descriptors and different levels of medical annotations were evaluated, with and without supervision from textual distances, using a database of computer tomography scans of patients with interstitial Human Body Parts diseases. However, the annotation by medical doctors for training and evaluation purposes is a difficult and time-consuming task, which restricts the supervised learning phase to specific CBIR problems of well-defined clinical applications.

**Keywords:** Shift Algorithm, Internet, Mobile Application, Wireless networks.

## I. INTRODUCTION

Human Body Parts disease is a major health problem and it affects a large number of people. Human Body Parts disease is the leading cause of death in the modern world. Unless detected and treated at an early stage it will lead to illness and causes death. It is also helpful for conducting detailed study and investigations about the nature of the Human Body Parts disease. According to

WHO (World Health Organization) and the CDC, Human Body Parts disease is the leading cause of death in the UK, USA, Canada and Australia. If Human Body Parts disease does not detected or treated in its early stages it will causes death of the patient. This project is mainly focuses on the developing the system to detect Human Body Parts disease in its early stages.

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This system can be used at Hospitals where the System can monitor, track or detect Patients health by using CT scan images and it is gives fast result which is useful to detect disease before it increases. As it detects disease in early stages which will help to start the treatment as soon as possible.

## II. LITERATURE SURVEY

Samundra Deep, JianPing et al [1] in “Pattern Based Object Recognition in Image Processing” Presented work carries out CBIR [Content Based Image Retrieval] techniques for pattern recognitions it also contend segmentation methods for feature extraction for that texture , boarder, colour such parameters are taken for object identification and object detection.

Theresa Princy, J. Thomas [2] in “Human Body parts Disease Prediction System using Data Mining Techniques” proposed various data mining and classification techniques to predict Human Body Parts disease. Various data mining techniques and classifiers such as DT, KNN ,Naive bayes , neural network which are used for efficient Human Body Parts disease diagnosis.

Sayali Satish Kanitkar , N. D. Thombare [3] in “Detection of Lung Cancer Using Marker Controlled Watershed Transform” Proposed Marker controlled watershed segmentation technique is used which extract the region minimum value from an image. Disadvantage of this method is it produces excessive over segmentation to reduce marker.

Anita chaudhary , Sonit Sukhraj Singh [4] in “Lung Cancer Detection on CT Images by using Image Processing” stated that main processes are Pre-processing, Segmentation, Feature extraction. In segmentation thresholding and watershed segmentation techniques are used to consume all different parts of lung and removes irrelevant details. Watershed segmentation performed on gradient image by using mayers flooding algorithm. Drawback of thresholding is threshold selection is not always straightforward.

Anand R, Veni S, Aravinth J [5] in “An Application of image processing techniques for Detection of Diseases on Brinjal Leaves Using K-Means Clustering Method” proposed K-means clustering method for detection of leaf disease that is on Brinjal leaf disease. For the detection of K-means clustering method uses different parameter such as area , perimeter, centroid and mean intensity .etc. The measure advantage of this method is gives more accuracy than other methods.

## III. SYSTEM ARCHITECTURE

We propose a novel framework for automatic segmentation of human bodies in single images. We combine information gathered from different levels of image segmentation, which allows efficient and robust computations upon groups of pixels that are perceptually

correlated. The existing and propose system both work on CBIR[content base image retrieval] Technology.

As shown in Fig 1, input image is pre-processed and then feature were extracted from that image. Then pre-processing done on existing image from database and key point i.e. feature extracted from database images. These features were getting compared with algorithm and matched image disease name displayed.

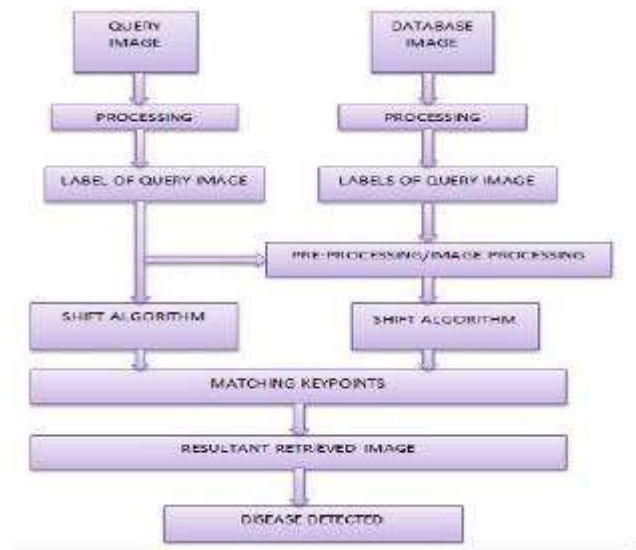


Fig 1: System Architecture

## IV. RESULTS

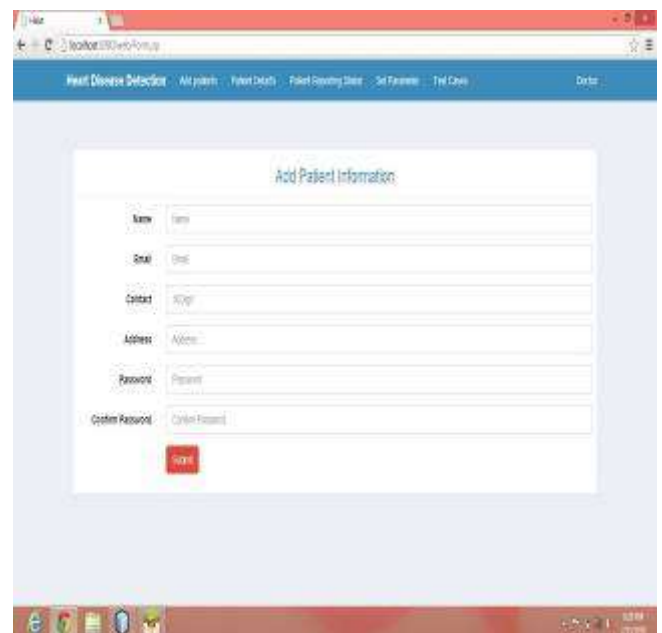


Fig 2: Patient Information



Fig 3: Set Test Case



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## V.CONCLUSION

On the basis of literature survey and by analysing the existing system, we have come to a conclusion that the proposed system will detect the body parts disease accurately by using CT scan images and it will also use the database for storing the patients reports and medical case history which will be helpful to the doctor for the diagnosis.

## REFERENCES

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