

AUTOMATIC VIDEO PLAY

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Abstract: Information based video retrieval is one of the important research area in image processing. Information based video retrieval means whenever an input is given by the user like image automatic video is played. It can be used for video search which is useful in web application. These methods can be used to improve the effectiveness of the information. Automatic video is played by image input and there are four categories such as Children, Youth, Adult and Seniors based on the given input automatic video is played from the categories. The model construct convolution neural network for image detection.

Index Terms - Video, Image, Frame, Neural Network.

I. Introduction

This is mainly due to its wide range of applications such as person identification, law enforcement, smart environment, visual surveillance, human-computer interaction, and image / video retrieval. After three decades of intense research, the state of the art approaches can achieve high recognition rate under controlled settings. However, face recognition in unconstrained real life environment remains challenging for most practical applications. This is achieved by training the model on a dataset and using a suitable CNN to classify the image to play the video.

It is a very challenging task to detect an object or to recognize an image from a digital image or a video. Image Recognition has application in the various field of computer vision, some of which include facial recognition, biometric systems, self-driving cars, emotion detection, image restoration, robotics and many more. Deep Learning algorithms have achieved great progress in the field of computer vision. Deep Learning is an implementation of the artificial neural networks with multiple hidden layers to mimic the functions of the human cerebral cortex.

The algorithm works in the following three steps:-

A large dataset of videos which are then converted to frames.

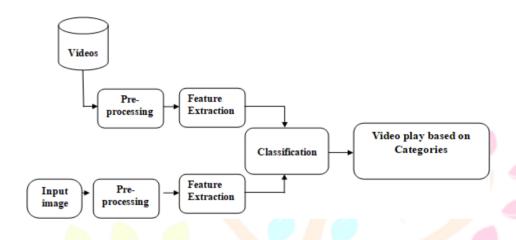
- Collection of facial features after alignment and extraction, on which hidden feature extraction is done by a pre-trained Convolutional Neural Network.
- A model that trains on the processed dataset and classifies them with the respective video based on input image.

II. LITERATURE SURVEY

- 1. Aggarwal, G., Roy-Chowdhury [1], A.K., Chellappa, R Video based Face recognition provides a setting where weak evidence in individual frames can be integrated over time, potentially leading to more reliable recognition in spite of the difficulties such as pose variation and facial expression.
- 2. Zhang and Martinez [2]investigated whether the methods, defined to recognize faces from a single still image, perform better if they could work with multiple images or video sequences.

- 3. Brunelli and Poggio [3]used four masks respectively to get the regions of eyes, nose, mouth and the whole face for recognition.
- 4. A.K., Chellappa, R[4] Video based Face recognition provides a setting where weak evidence in individual frames can be integrated over time, potentially leading to more reliable recognition in spite of the difficulties such as pose variation and facial expression.

III. IMPLEMENTATION



This project detects videos of stored images based on different categories. But we are implementing for the real time images
In this project, by image input the automatic video is played and there are four categories of videos Childrens, Youth,
Adults and Seniors based on the input from the respective category is going to play.

- o The input image is pre-processed and smoothed.
- o This process improves image quality and also removes image noise.
- o The input image is used by the feature extraction network.
- Feature extraction is very much important for the initialization of processing & facial extracted features provides the result by comparing these features.
- o The images are trained using CNN algorithm in order to classify the input image as age type as adult, children, youth and seniors.
- o CNN models are built to evaluate its performance on image recognition and detection datasets.

Research Through Innovation

IV. OUTCOMES



Fig1. Shows the home page of automatic video play.

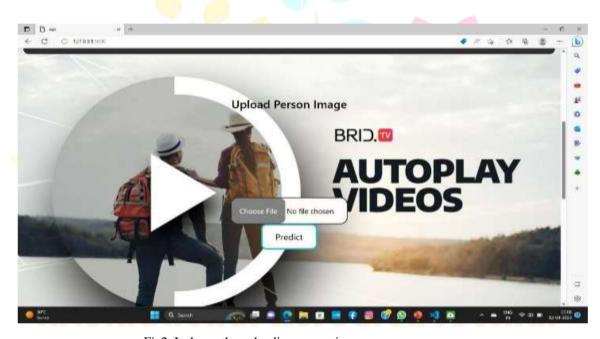


Fig2. It shows the uploading person image.



Fig3. It shows the age type of children.



Fig4. It shows the age type of youth.



Fig5. It shows the age type of adult.

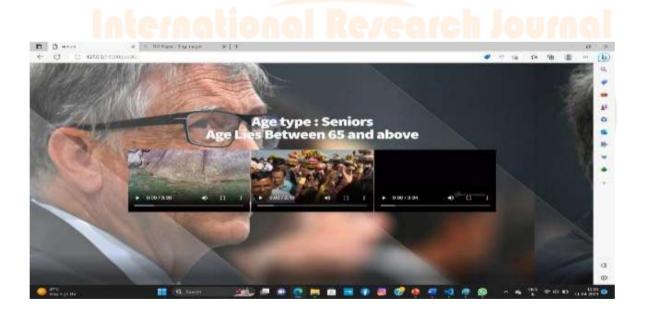


Fig5. It shows the age type of seniors.

V. CONCLUSION

In the time of growing technology, there is so much what is in ready (to be used) on the the net. any body can easily way in this what be used) on line. Not all of this what is in is right for all existence stage groups In our undertaking, we have dealt with such motion viewing records ready (to be used) on line. Here, we are putting groups the motion records into different existence stage groups for which they are right based on what into viewing is in the motion viewing record and the observations present in the motion viewing record. The outcomes are worked out based on several groups of conditions so that the of note for the existence stage groups is well defined. Using CNN algorithm the age type and group is well defined.

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