Teachable Machine Predicting Human Emotions

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Abstract: It train a computer to recognize your own image. It teach a model to classify images using files or webcam. In this page I trained my computer to recognize the emotions using machine learning. We have trained through huge amount of data by giving lot of data. It identify the patterns to train the process and next we export our model to predict the emotions, here the machine is not memorizing, but the machine is learning the patterns from the data by using AI. It can perform all intellectual tasks that a human can. It describe the key facial features that help us recognize a person's emotions such as sad, happy, shy, excitement, stress. The computers that can be programmed to be intelligent or at least smart. AI is the ability of machines to mimic human capabilities in a way that we would consider smart. Machine learning is an application of AI. With machine learning, we give the machine lots of examples of data, demonstrating what we would like it to do so that it can figure out how to achieve a goal on its own. Machine learns and adapts its strategy to achieve the goal. In our example, we are feeding the machine images of emojis via the inbuilt camera. The more varied the data we provide, the more likely the AI will correctly classify the input as the appropriate emotion. In machine learning, the system will give a confidence value; in this case, a percentage and the bar filled or partially filled, represented by color. The confidence value provides us with an indication of how sure the AI is of its classification. This lesson focuses on the concept of classification. Classification is a learning technique used to group data based on attributes or features. The model is working as expected. The emoji takes up the whole screen as it was trained.

EXISTING SYSTEM

Face recognition is a biometric identification technique that uses unique characteristics of an individual's face to identify them. Most facial recognition systems work by comparing the face print to a database of known faces. If there's a match, the system can identify the individual. However, if the face print isn't in the database, the system can't identify the individual. Facial recognition technology is often used for security purposes, such as identifying criminals or preventing identity theft. It can also be used for more mundane tasks, such as finding a lost child in a crowded place or identifying VIPs at an event. Some facial recognition systems are equipped with artificial intelligence that can learn to identify individuals even if their appearance has changed, such as if they've grown a beard or gained weight. In our proposed system we use various datasets and live video streaming to predict and recognize emotions using Convolutional Neural Networks. We use complex modules...
such as Tensor flow, image Search. The basis of recognizing emotions in our case is that we use depths and areas of peaked facial lines and predict emotions according to their facial structure. Using these emotions we control music and enhance the psychological mindset of people living in a society. Thus reducing negativity and causes of suicide. Emotion recognition is used for a variety of reasons Affective uses it to help advertisers and content creators to sell their products more effectively. Affective also makes a Q-sensor that gauges the emotions of autistic children. Emotion was a start up company which utilized artificial intelligence to predict "attitudes and actions based on facial expressions". Apple indicated its intention to buy Emotion in January 2016. Vison provides real-time emotion recognition for web and mobile applications through a real-time API. Visage Technologies AB offers emotion estimation as a part of their Visage SDK for marketing and scientific research and similar purposes. Eyeris is an emotion recognition company that works with embedded system manufacturers including car makers and social robotic companies on integrating its face analytics and emotion recognition software; as well as with video content creators to help them measure the perceived effectiveness of their short and long form video creative. Emotion recognition and emotion analysis are being studied by companies and universities around the world.

I. PROPOSED SYSTEM

The primary objective of the proposed methodology is to recognize the emotions like happy ,sad ,shy ,love ,excitement ,stress .Here machines identifying patterns from data and learning by themselves. Emotionally intelligent machines it is as far away as it seems. The latest generation of AIs have come about thanks to an increase in data available for computers to learn from, as well as their improved processing power. These machines are increasingly competitive in tasks that have always been perceived as human. In our proposed system we use various datasets and live video streaming to predict and recognize emotions using Convolutional Neural Networks. Over the last few decades, artificial intelligence (AI) has become increasingly good at reading emotional reactions in humans. But reading is not the same as understanding. If AIs cannot experience emotions themselves, can they ever truly understand us? And, if not, is there a risk that we ascribe robots properties they don’t have?. We use complex modules such as Tensor flow, Pyimage Search. The basis of recognizing emotions in our case is that we use depths and areas of peaked facial lines and predict emotions according to their facial structure. Using these emotions we control music and enhance the psychological mindset of people living in a society. Thus, reducing negativity and causes of suicide.
II. MODELLING
III. CONCLUSION

Human emotions are one which can be predicted easily, or which can be faked. No one knows, what the mind of the other person truly feels. We thus, made an effort to bring out the emotions and resolve the negative emotions, by bringing the, to a happy state, using therapy. Emotions are detected using Convolution Neural Networks, to better grasp the eccentric depths and weight of the facial matrix. The depths are thus analysed and compared with the existing data-sets to compare and contrast an emotion. Our faces, thus say all. Each and every micro-projection is taken into consideration, and thus the emotion matrix was plotted. Music being one of the best healers, we control Music using emotions; based on the emotion detected, the music is made to change. Emotion recognition thus, in near future will prove its worth in the upcoming high-end technologies. Our focus is mainly on improving the accuracy of image detection on our system by using tensor flow library. Here we have excluded the live detection for predicting emotions. It is very difficult to provide best accuracy. In this project a Emotion/Facial Recognition model has been trained and saved. It can recognize/detect the facial expressions of an individual on a real time basis that whether the individual is angry, Fear, Happy, Sad, excitement, stress.

IV. REFERENCES


