**Facial Expression Recognition**

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Story

A Human being can easily sense another person's emotion, but it is a very difficult task for the machines to understand. Person emotions consist of Fear, Anger, Happy, Surprise, Sad, Neutral and Disgust. If a machine was able to detect these emotions and take necessary actions it would be of huge success like preventing people from making some rash decisions, enlighten the mood. For instance, in a classroom environment, an emotion detection model will help in generating a report of students' emotions which will help the lecturer to improve the upcoming lecturers to attract more students.

It will be a web-based application where the user can upload an image or take a picture through a camera. Also, we will try to make it into an app for easy use on smartphones. So how do we detect emotions in an image? We are going to make use of an open-source data set — Face Emotion Recognition (FER) from Kaggle. The model consists of two modules one is Face detection and the other is Emotion detector.

References

Research paper on Facial Emotion Recognition:

https://ieeexplore.ieee.org/document/8549735

https://ieeexplore.ieee.org/document/9299256