

# Facial Expression Recognition

Group-24

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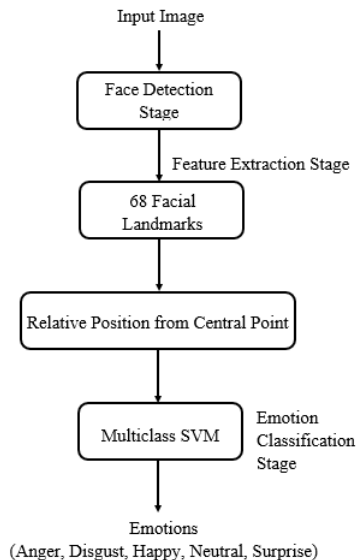
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# Facial Feature Extraction on Detected Faces



68 Facial Landmarks

Relative position from central point



# Results

- We obtain an accuracy of 84.1%, when classifying the data into 8 emotions on the CK+ dataset.
- We then reduce the set to 5 emotions (leaving out contempt, fear, and sadness), because the three categories had very few images and this approach gives 91.10% accuracy a lot better than previous results.

Kernel	Mean Accuracy
linear	91.10%
polynomial	89.40%
rbf	57.20 %

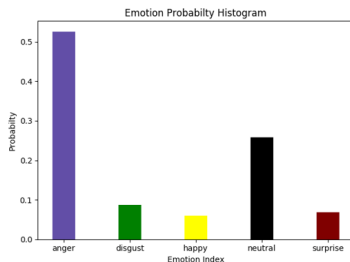


Figure: Results on Class Image

# Live Testing of trained SVM Model

- We have implemented the above approach for live webcam, it shows five emotions:
- Anger, Disgust, Happy, Neutral Surprise
- The results can be visualized from the images shown here.

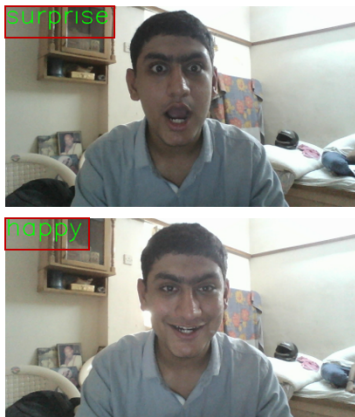


Figure: Results from Live Webcam

# References

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