## **EMOTION DETECTION**

#### **BVRIT HYDERABAD College of Engineering for Women**

May 29, 2021

- Chigurupati Sharon 18WH1A0580
- Erla Haritha 18WH1A05A6
- Valeti Likhitha Chowdary 18WH1A05A7
- Kalidindi Harshitha 18WH1A1218
- Y Lalitha Akshaya 18WH1A1228

## **DESCRIPTION**

• **Emotion Detection** is detecting humans emotion based on their expressions and display their emotion



# **DATA SET**

	emotion	pixels	Usage
0	0	70 80 82 72 58 58 60 63 54 58 60 48 89 115 121	Training
1	0	151 150 147 155 148 133 111 140 170 174 182 15	Training
2	2	231 212 156 164 174 138 161 173 182 200 106 38	Training
3	4	24 32 36 30 32 23 19 20 30 41 21 22 32 34 21 1	Training
4	6	4 0 0 0 0 0 0 0 0 0 0 3 15 23 28 48 50 58 84	Training

• Rows : 35,887

Columns: 3

• Target Columns : Emotion

 Number of emotions: 7 [ 0=Angry, 1=Disgust, 2=Fear, 3=Happy, 4=Sad, 5=Surprise, 6=Neutral]

# **LIBRARIES**

- Pandas
- Numpy
- Convolutional Neural Network
- OpenCV

### **APPROACH**

- Loading data
- Pre-processing the data
- Building model
- Training data
- Testing data
- Implementing OpenCV

# **LEARNINGS**

- Concepts of CNN
- Concepts of OpenCV
- Reducing overfit of the models

# **CHALLENGES**

- building layers and determining parameters
- Preprocessing the data
- Improving accuracy of the model

## **GITHUB LINK**

https://github.com/akshaya-9/EmotionDetection

