EMOTION DETECTION

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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 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]

TECHNICAL STACK

- Python 3.8
- Pandas
- Numpy
- TensorFlow
- Keras
- Matplotlib
- OpenCV
- Google Colaboratory

APPROACH

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

STATISTICS

- Lines of code - 200
- Number of functions - 14

REFERENCE

https://medium.com/theblock1/eventum-alpha-emotion-recognition-meets-blockchain-5acd8fa95c8

https://keras.io/guides/

DEMO