

OUTPUT FOR DROWSINESS DETECTION

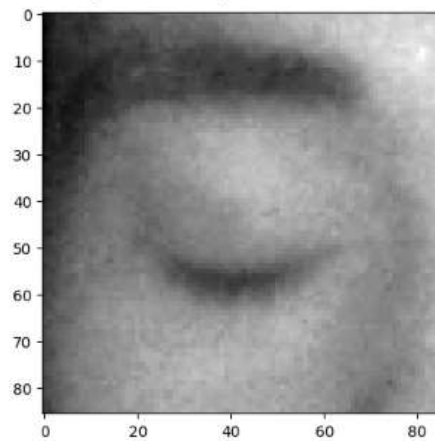


Fig.1 Setup the image in graph

Total images loaded: 945
Training data shape: (756, 224, 224, 3)
Validation data shape: (189, 224, 224, 3)

```
17225924/17225924 ————— 0s 0us/step
Epoch 1/10
24/24 ————— 181s 7s/step - accuracy: 0.8550
Epoch 2/10
24/24 ————— 198s 7s/step - accuracy: 0.9867
Epoch 3/10
24/24 ————— 200s 7s/step - accuracy: 0.9928
Epoch 4/10
24/24 ————— 163s 7s/step - accuracy: 0.9965
Epoch 5/10
24/24 ————— 198s 7s/step - accuracy: 0.9995
Epoch 6/10
24/24 ————— 159s 7s/step - accuracy: 0.9856
Epoch 7/10
24/24 ————— 198s 6s/step - accuracy: 1.0000
Epoch 8/10
24/24 ————— 160s 7s/step - accuracy: 0.9978
Epoch 9/10
24/24 ————— 205s 7s/step - accuracy: 1.0000
Epoch 10/10
24/24 ————— 198s 7s/step - accuracy: 1.0000
```

Totally 10 epoch has been taken and the accuracy has been obtained above the range of 0.85 to 1.0

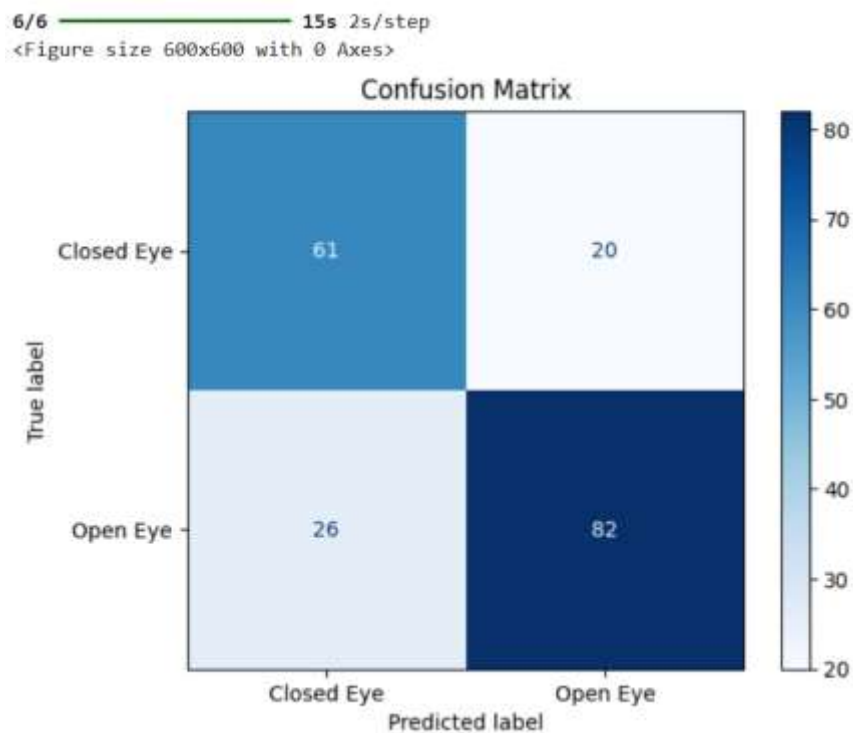


Fig.2 Confusion Matrix

- A confusion matrix plot showing true positives, false positives, true negatives, and false negatives.
- Model accuracy score.
- Detailed classification report (precision, recall, F1-score, and support).

Classification Report:

| | precision | recall | f1-score | support |
|--------------|-----------|--------|----------|---------|
| Closed Eye | 0.70 | 0.75 | 0.73 | 81 |
| Open Eye | 0.80 | 0.76 | 0.78 | 108 |
| accuracy | | | 0.76 | 189 |
| macro avg | 0.75 | 0.76 | 0.75 | 189 |
| weighted avg | 0.76 | 0.76 | 0.76 | 189 |

OUTPUT FOR DRUNK DETECTION

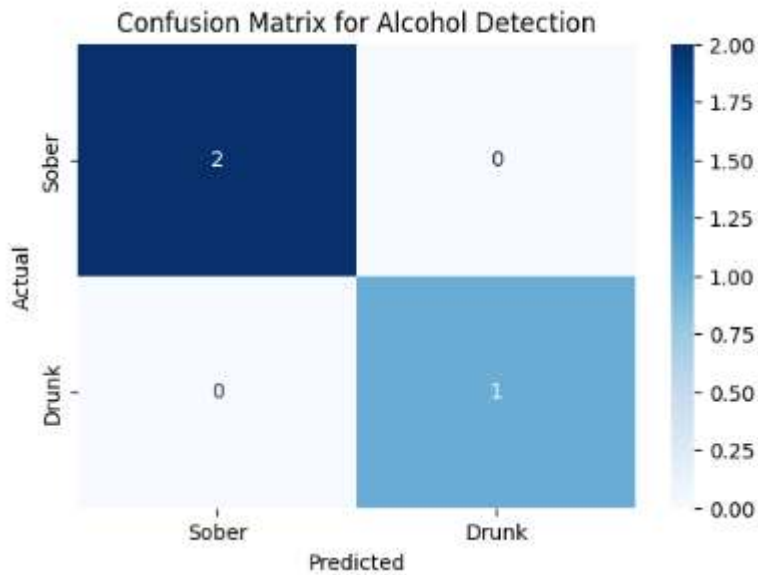


Fig.3 Confusion Matrix for alcohol detection

Accuracy: 1.00

Classification Report:

| | precision | recall | f1-score | support |
|--------------|-----------|--------|----------|---------|
| 0 | 1.00 | 1.00 | 1.00 | 2 |
| 1 | 1.00 | 1.00 | 1.00 | 1 |
| accuracy | | | 1.00 | 3 |
| macro avg | 1.00 | 1.00 | 1.00 | 3 |
| weighted avg | 1.00 | 1.00 | 1.00 | 3 |

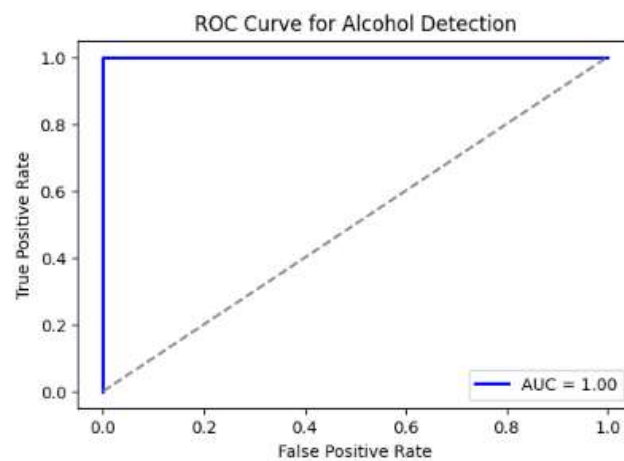


Fig.4 ROC Curve for Alcohol detection