Detection of Driver Drowsiness

|Computer Vision (YOLO)

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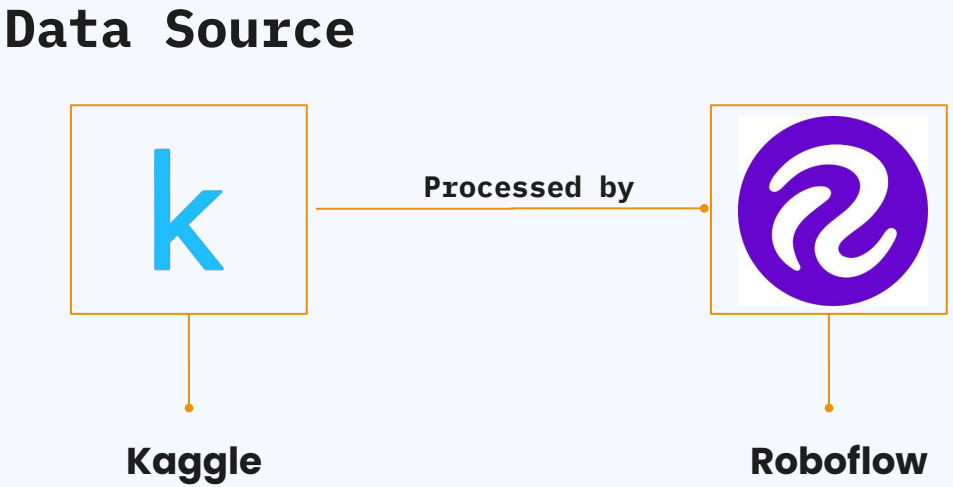
01

Data Gathering

01 Data Gathering



02

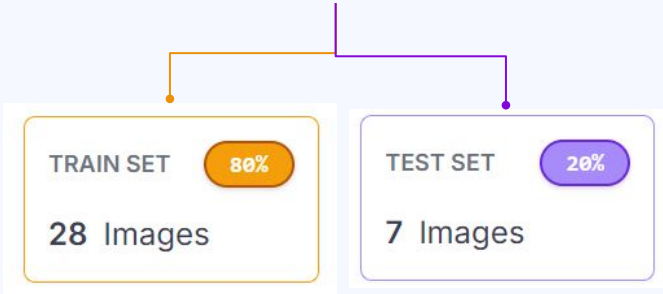
Data Processing

02 Data Processing(Roboflow)

3 Classes

CLASS NAME
Normal
Sleep
Yawning

35 Total Images



Tools Used..

01

Google Colab

is a hosted Jupyter Notebook service

02

OpenCV

Open-source library for computer vision and ML, offering tools and algorithms for processing images and videos

03

Ultralytics

known for creating the YOLO object detection models

04

IPython

Interactive Python shell offering a more powerful environment than the standard shell

03

Model Development & Training

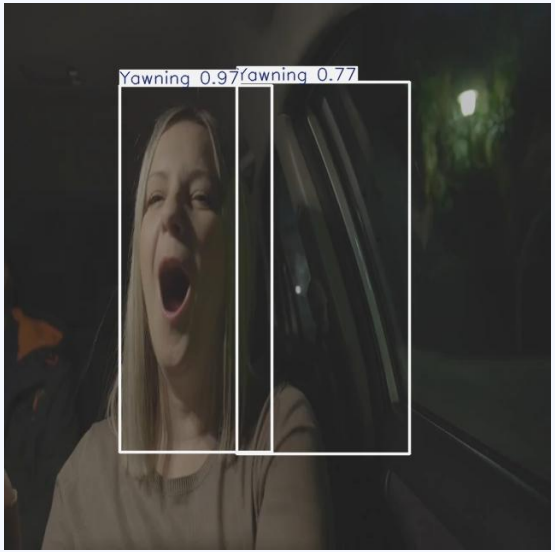
03 Model Development & Training

Task	Mode	Model	Epochs	Imgsz
Detect	Train	Yolov8	20	640

04 Model Predictions Result

Sleep

Yawning



Normal

Conclusion

Future work

- Audio alert
- More features
- Improve performance
- Implementation

Thank you for listening!

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