



Driver Drowsiness Detection

Goal

- Labelled two classes (open&closed) , based on the eyelid-closure

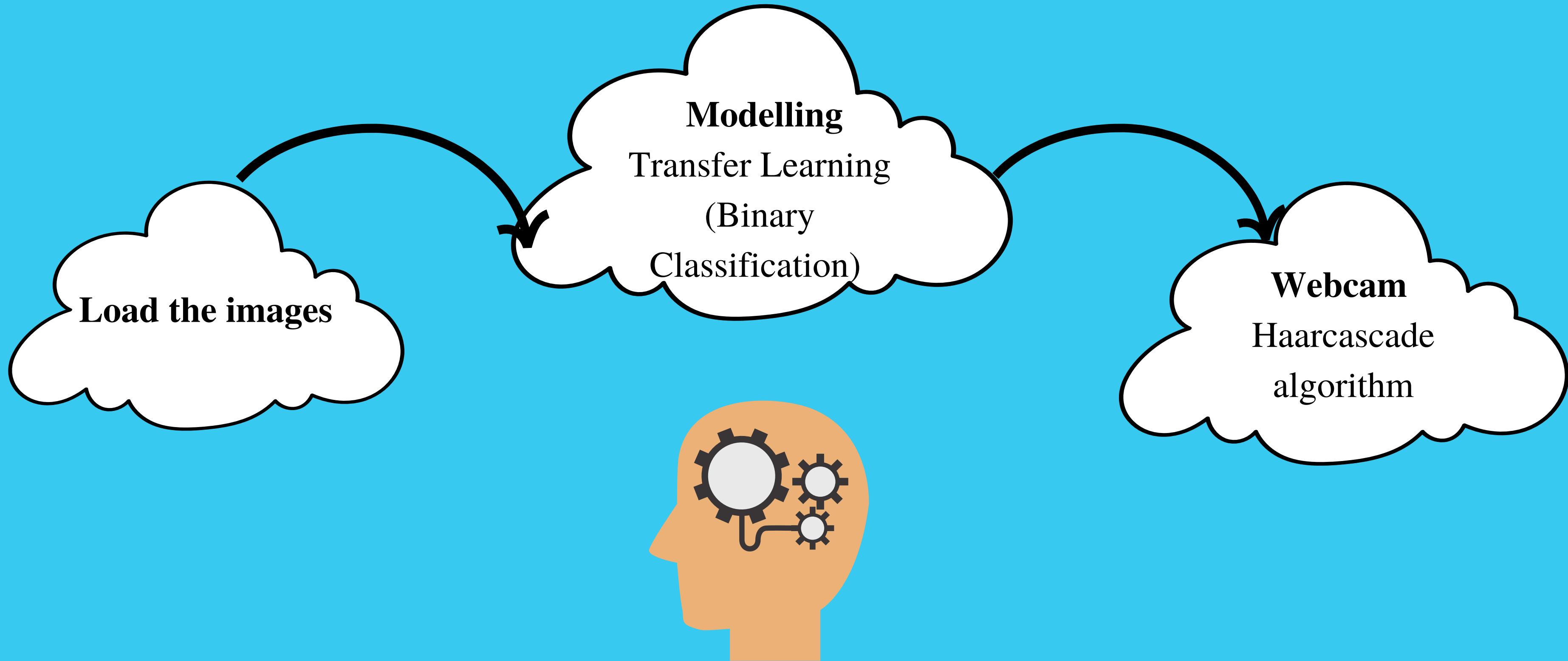
Sleepy (eyes closed consistently)

Active (eyes open consistently)

Signs of Drowsiness:

- Difficulty keeping eyes open
- Yawning
- Frequent blinking
- Difficulty concentrating
- Swerving out of the lane and delayed reaction to traffic
- Nodding

Mind Map



Tools

- Anaconda
- Package of multiple libraries

IDEs

- Jupyter notebook
- VSCode

Libraries

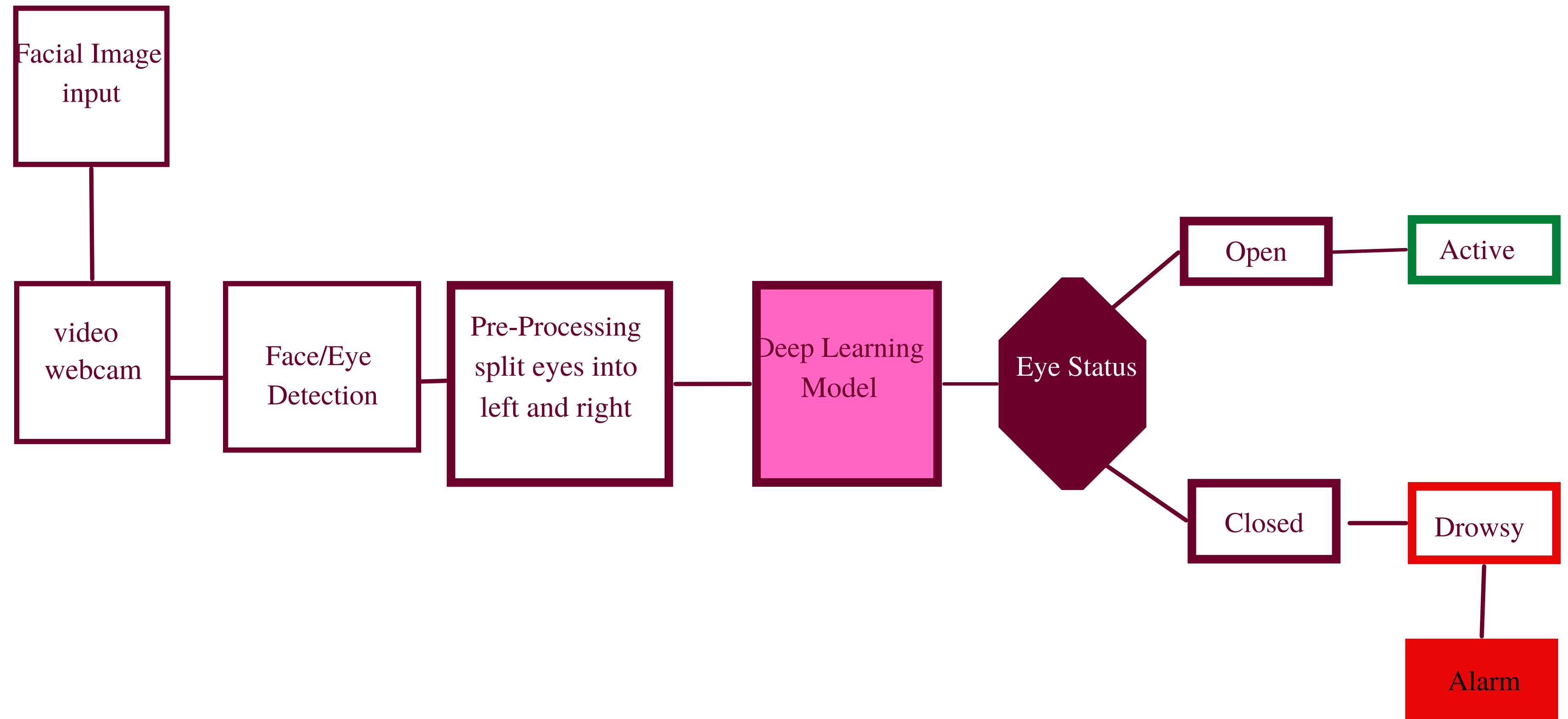
- Tensorflow
- Opencv
- Numpy
- Pygame



Transfer Learning

- Takes weights and architecture of pre-trained network
- Learns from previous training images
- Nature of the problem should be the same
- Use last fully connected (FC) layer

Flowchart



DRIVE SAFELY

SLEEP WITH YOUR
LOVED ONES

THANK YOU VERY MUCH
FOR YOUR ATTENTION

