1. Procedure to train:

1.1 Regression network:

1) regression_network.ipynb in Github is for creating the regression network. It uses the data from keys.text in Github to train.
2) The model from (1) is saved as model.json and model.h5.

Classification network:

1) classification_network.ipynb in Github uses model.json form Github and model.h5 from drive to create input for the classification network. (Link to model.h5 : https://drive.google.com/file/d/1YK_be5plQZee7WDt9BaR-mU7ZSgWSbAJ/view?usp=sharing).
2) The StateFarm Distracted Driver Detection Dataset is used in (1).

1.2 Standalone Classification network:

1) standalone_classification.ipynb in Github uses the whole image resized to 120x120 for the learning process. The model https://drive.google.com/file/d/1ZWVdUvOtHvhRGBN-uuRPgKgMt9zlq-QX5/view?usp=sharing is the result of standalone classification network training.

Procedure to Use the GUI:

Screen 1 : 'Upload' will take you to a screen where you can give details of input image.

Screen 2 : 'Image Name' has a text box where you can input the path of the image. Clicking on 'Analyze Image' button will run the model on the input image and will display the result. Additionally, if the input image is a part of the training/validation dataset, the GUI will also disply the original label of the image. Clicking on 'Home' button will take you to the Home screen.

The sample images for running the model are in the 'images' folder in Github.

Model Link to be used in GUI Demo : https://drive.google.com/file/d/1V91iwHr4YjLdtQ80p2q5S7a0HM4uOSbX/view?usp=sharing

YouTube Link for GUI Tutorial : https://youtu.be/KeFj3yKZl0k