Distracted driver detection using Machine Learning - Structured Abstract

Context:
To design a well-trained Convolutional Neural Networks with the combinations of multiple layers to reduce the loss.

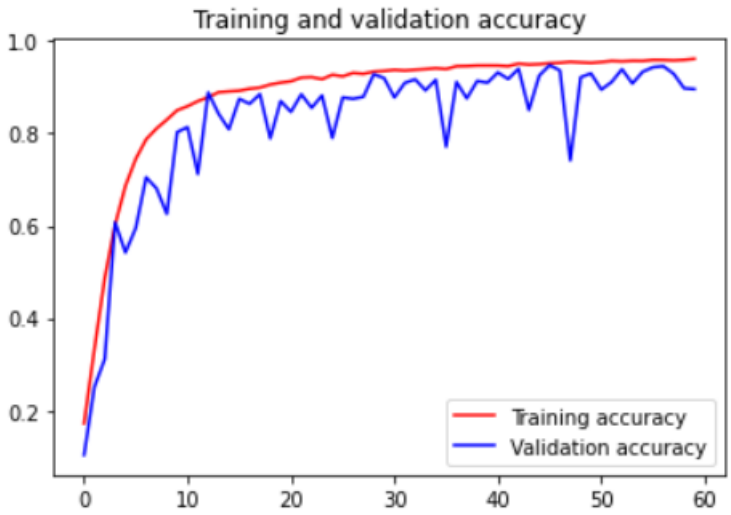
Objective:
To improve the accuracy of trained Convolutional Neural Networks (CNN) to identify the test images.

Method:
Trial and error method until the right combination of layers in both ways to improve the training and validation accuracy and to reduce the loss of both training and validation images.

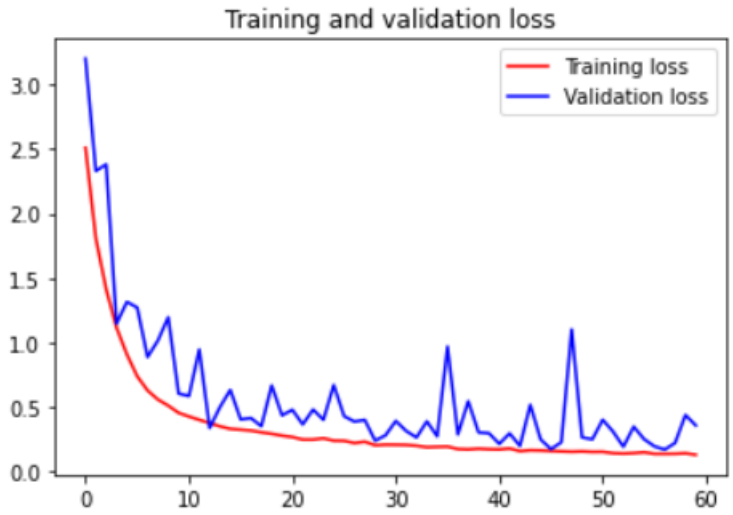
Results:
The accuracy was increased from 0.1 to 0.95 gradually along 60 epochs with the loss reduction from 2.3 to 0.1. This was achieved in both training and validation set.

Novelty:
Many publications and articles suggested not to use batch normalization and dropout in same model. But the use of batch normalization and dropout increases the performance the model after multiple trials.

Key images:



<Figure size 432x288 with 0 Axes>



<Figure size 432x288 with 0 Axes>