DRIVER DROWSINESS DETECTION MINI REPORT 8

BASU VERMA

(142002007)

under the guidance of

Dr Satyajit Das



INDIAN INSTITUTE OF TECHNOLOGY PALAKKAD PALAKKAD - 678557, KERALA

Contents

Lis	st of Figures	ii
1	Using CNN model on blur image	1
	1.0.1 Conclusion	1

List of Figures

1.1	Original and Gaussian blur image pic1	•
1.2	Original and Gaussian Blur Image pic2	

Part. 1

Using CNN model on blur image

Using CNN model on blur image. For blurring the image, I used Gaussian filter with 9x9 kernel. Done 2D Convolution of the Gaussian filter with the original image to generate the blur image. Then applied the haar cascade classifier on the image for detection of eye portion.

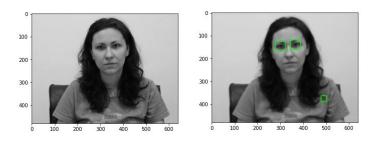


Fig. 1.1 Original and Gaussian blur image pic1

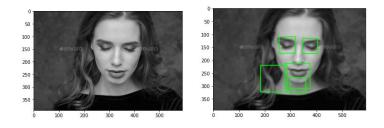


Fig. 1.2 Original and Gaussian Blur Image pic2

After image processing, applied eye classifier CNN model for classification of image into close or open eye. In Fig. 1.1, the model is performing good with output value as 0.99 for open eye. For Fig. 1.2, the model performance is very bad as it is showing value as 1.0 that is, open eye but it should be close eye.

1.0.1 Conclusion

After blurring of image, the Haar Cascade classifier is not performing good. It is giving very less accuracy as it is detecting other portion of face also as the eye portion which leads to bad performance of subsequent model also.