Image Processing and Computer Vision

George Lancaster
Ren Jiang
dept. of Computer Science
University of Bristol
Bristol, United Kingdom
qv18258@bristol.ac.uk

***Abstract*—This report outlines the tasks completed for Image Processing and Computer Vision assignment one.**

I. Task One

Subtask a

(a) darts4.jpg

(b) darts5.jpg

(c) darts13.jpg

(d) darts14.jpg

(e) darts15.jpg

Fig. 1: Five images with the applied face detection algorithm.

A. Subtask b

1) : TPR is difficult to assess because...

2) : It is always possible to get a 100 per cent detection rate on any classification task as we can select all possible areas of an image, regardless if they contain a target or not. The key to a good classifier is to get a high true positive rate, whilst keeping the false positives minimal.

3) : Calculate the F1 score here.

II. Task Two

A. Subtask a

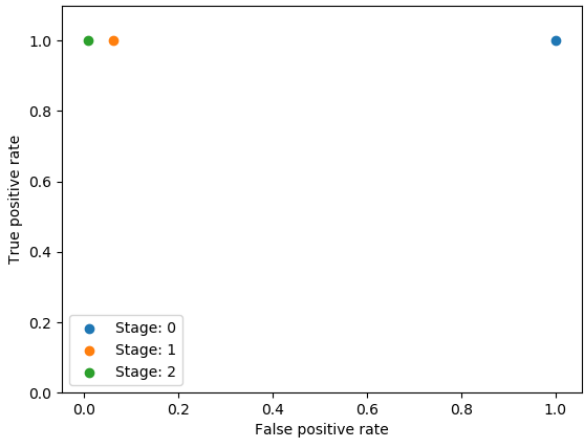

Fig. 2: True positive rate plotted against false positive rate, when training the cascade classifier on images of dartboards. Each stage of training has been plotted as its own point.