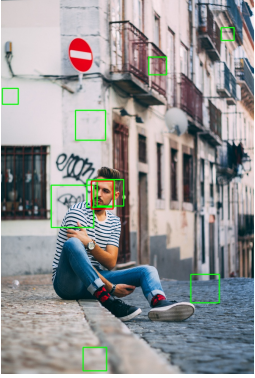


No Entry Sign Challenge Report

1 The Viola-Jones object detector

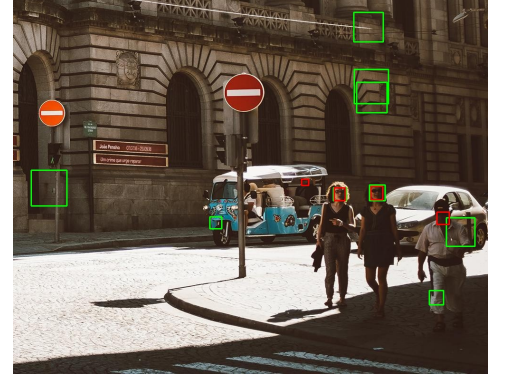
1.1 Ground truth and visualisation



(a) NoEntry1.jpg



(b) NoEntry5.jpg



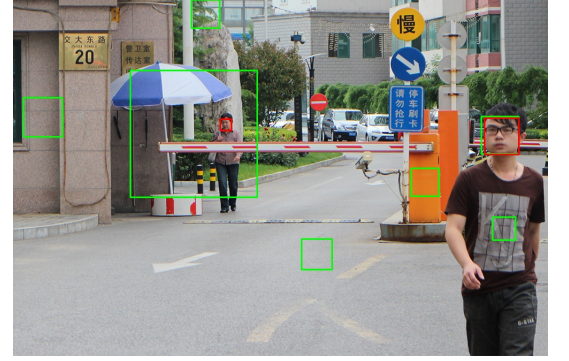
(c) NoEntry11.jpg



(d) NoEntry2.jpg



(e) NoEntry4.jpg



(f) NoEntry7.jpg

Figure 1: Six images with the bounding boxes of the ground truths (in red) and actually detected instances (in green) from the frontal face detector

1.2 IOU, TPR and F_1 score

Table 1: True positive rate and F_1 score of the frontal face detector on each image

Filename	True positive rate	F_1 score
NoEntry0.jpg	0	0
NoEntry1.jpg	0	0
NoEntry2.jpg	0	0
NoEntry3.jpg	0	0
NoEntry4.jpg	0	0
NoEntry5.jpg	0	0
NoEntry6.jpg	0	0
NoEntry7.jpg	0	0
NoEntry8.jpg	0	0
NoEntry9.jpg	0	0
NoEntry10.jpg	0	0
NoEntry11.jpg	0	0
NoEntry12.jpg	0	0
NoEntry13.jpg	0	0
NoEntry14.jpg	0	0
NoEntry15.jpg	0	0

2 Building and testing my own detector

2.1 Training performance

ROC graph

2.2 Testing performance

3 Integration with shape detectors

4 Improving my detector

References