

# **DD2427: Lab Project**

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# Introduction

Summary of the basic lab project:

- Implementation of Viola & Jones face detector
- Test my face detector on images



# Our extensions to the basic face detector

How we improved the default implementation:

- came up with a different way of computing the threshold of the weak detector
- had a clever way of speeding up the training/detection time..
- computed a cascaded classifier and your findings.
- .....



**Slides describing details of what you did**



# Changed Visual Features Extracted

Mention

- the type of features
- how these features can be computed quickly and efficiently



**Perhaps changed the weak classifiers**



# Made changes to the Boosting algorithms



# Perhaps Made Changes to speed up Detecting Faces





# Results of Learned strong classifier Vs Your new strong classifier

Details about training

- Number of training images (positive and negative)
- Number of features used

Maybe Picture of learned classifier. Picture of 1st  $n$  features chosen. Picture of ROC curve.



## Results: applied to pictures

Details about

- how many scales searched over
- setting of the threshold

Pictures of detections.



## Our final ideas/thoughts

Given the time:

- Which improvement would you like to implement
- Which issue would you like to investigate

