

Robust Real-time Object Detection

by

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Outline

- Object detection task
- Definition and rapid evaluation of simple features for object detection
- Method for classification and feature selection, a variant of AdaBoost
- Speed-up through the Attentional Cascade
- Experiments and Results
- Conclusions

Object detection task

- Object detection framework: Given a set of images find regions in these images which contain instances of a certain kind of object.
- Task: Develop an algorithm to learn an fast and accurate method for object detection.

To capture ad-hoc domain knowledge classifiers for images do not operate on raw grayscale pixel values but rather on values obtained from applying simple filters to the pixels.