Face Dtecttion:A Survey

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Introduction

- A face detector has to tell whether an image of arbitrary size contains a human face and if so, where it is.
- One natural framework for considering this problem is that of binary classification, in which a classifier is constructed to minimize the misclassification risk.
- The algorithm must minimize both the false negative and false positive rates in order to achieve an acceptable performance.

Techniques

- Finding faces in images with controlled background
- Finding faces by color
- Finding faces by motion
- Using a mixture of the above
- Finding faces in unconstrained scenes

Neural Network Algorithm

- A neural networks based upright frontal face detection system. The retinally connected neural network examined small windows of an image and decided whether each window contained a face. The system arbitrated between multiple networks to improve performance over a single network.

Viola Jones Algorithm

- Haar Features
- Integral Image
- Adaboost
- Cascading

Conclusion

After surveying these methods find some of the drawbacks for above method and we conclude that we try to implement the method of Viola Jones algorithm

References

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