Aesthetic Assessment of Photographic Images

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Abstract

The word 'aesthetics' refers to the principles of the nature and appreciation of beauty. Judging beauty and other aesthetic qualities of photographs is a highly subjective task. Everyone has his own perspective to judge beauty of images, in spite of that certain features please human more than certain others. Our system attempts to take the pain of out of common tasks used in personal computers and social media, like organizing and ordering images according visual beauty. In this project, we have implemented software for automatic aesthetic assessment of photographic images. We are trying to identify important features or parameters that distinguish high and low quality images. In this assessment, we have used computational approach and compared it with actual human assessment using machine learning methods.

Important Modules





Identifying Features

Identified low level visual featurs on which aesthetics of an image is heavily dependent



Feature Extraction

Extracted 31 identified features using python and openCV libraries for each sample image

Testing

Used for photo rating system and sorting of Images



Aesthetic Score Prediction

Achieved most accurate score predictions in Boosted Decision Tree Regression Model



Machine Learning

Compared different regression models on our training datasets

Salient Features

Aesthetic Ratings prediction of images

Automatic sorting and Organizing for given set or folder of images

Able to find "Professional" photo or a "Snapshot"

Understanding of human aesthetic assessment