Experiments Conducted

- Identifying features representing photo quality:

We referenced different principals of photography and chose set of features. Then we performed predictive experiments in Azure Machine Learning Studio using different datasets with different combinations of features.

- Comparative Study of different models of regression for :

We conducted predictive experiments on different datasets for different regression algorithms and analyzed their results on standard metrics.

- Size and Variety of training dataset:

On changing size of training datasets, we found variations in prediction accuracy and its error. Also by adding variety of images (Blurred, gray, insects', animals, from different sources) to dataset, we got variations metrics of prediction model.

Results

- We found that human perception about beauty of image is dependent on some classes of features like compositional (structural) and content attributes.
- For our datasets, we found Boosted Decision Tree Regression gives best accuracy results.
- As we increased size of training datasets, we got better results. Also by adding different varieties of images, accuracy was improved.