

HPC CLOUD HACK 2018

Team **Belkin**

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Hack Goal

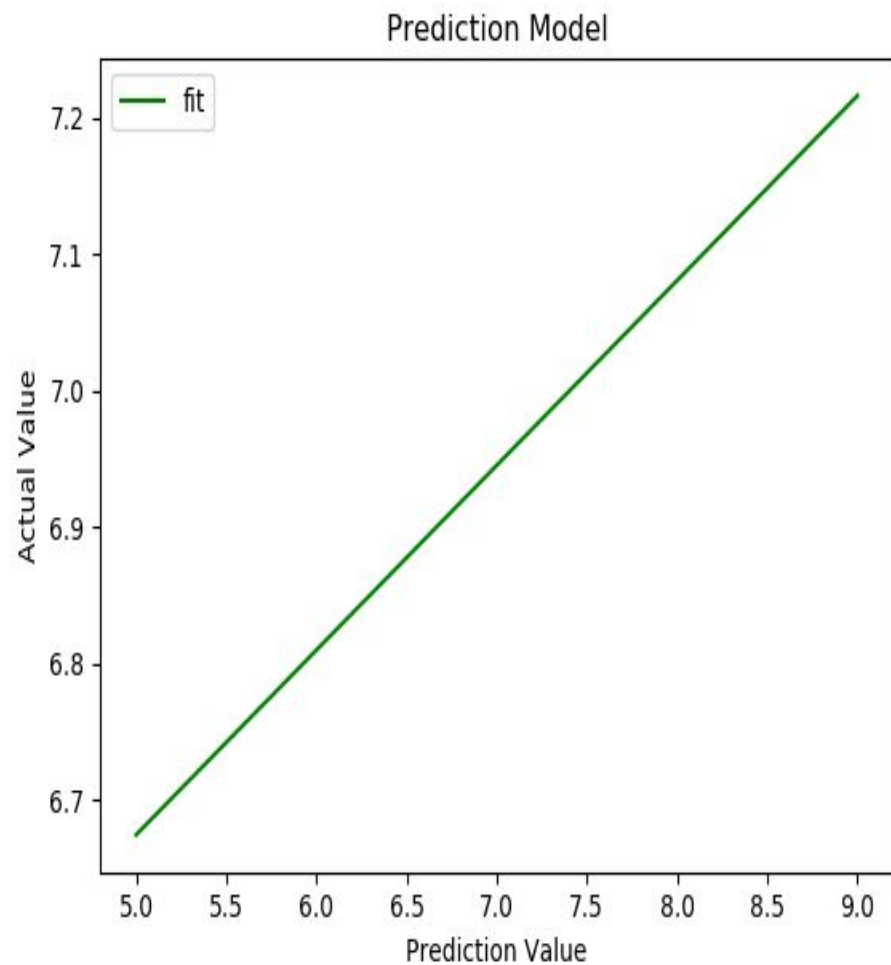
Create a model using Artificial Intelligence to predict IMDB(Overall) ratings based on ratings of different individual factors

Hack Goal

- Gather data from
- Filter data into usable form
- Create a Machine
- Feed the data to the model
- Compare the prediction with a test data
- Use linear regression to find relation with prediction and actual value

Results

- All factors were directly related to overall movie ratings but some more than others
- Plot rating has the highest correlation (of the factors used) with overall movie ratings
- Model prediction (used 90% of the data for training) gave us 8.75% error
- The prediction model can help movie makers choose what aspect of the movie to prioritize
- Movie companies can use this model to make estimation of how successful their movie is going to be



Prediction	Actual
7.6	7
7.6	7.5
7.6	6.6
7.6	7.9
7.6	7.8
7.6	6.8
7.6	7.4
7.4	5.3
7.6	7.4
7.2	7.9
5.0	6.3
7.6	6.7
8.0	6.5
8.0	6.2
7.6	5
7.6	7
7.6	6.3
7.6	5
7.9	8
7.6	7.6
7.6	7.9
7.6	8.3
8.1	6.7
7.6	5.6
7.6	7.6
7.6	7.2
7.6	6.3
7.6	7.1
7.6	6.2
7.6	8.1
5.0	7

Obstacle and Solutions

- Could not get data from IMDB and Rotten Tomatoes APIs directly
 - Had to look for data already compiled
- Transferring files to the Google Cloud
 - Had to generate keys using Putty