

Predicting a Film's Rating Utilizing Machine Learning

Joel Martinez
Texas State University

Jose Garcia
Texas State University

Kameron Bush
Texas State University

February 28, 2019

Abstract

We present a program that will utilize existing data on films that have been released in order to predict the rating of a film that has yet to be released.

1 Problem Description

When creating a film, there are many factors that attribute to the success of the film. Film producers always want to make a profit and they will not know if their film will be a 'hit' or a 'flop' until it is released to the public. Our program will utilize factors to predict the average rating a film will receive and this will represent the film's predicted success.

2 Survey

To see how much of an impact this project would have with the general population, we asked 50 students their opinion.

Q: Do you believe this project will have an impact on which movies you will watch based on the rating generated?

37 students said it would have an impact.

9 students said it would not impact them.

4 students said they did not know.

3 Plan

March 8th - Understand the Problem in-depth

March 14th - Develop a data base for the code

March 25th - Complete a base algorithm for Project

March 29th - Complete Intermediate Project Report

April 10th - Research ways to make algorithm more accurate

April 20th - Edit algorithm to be more effective and more precise

April 29th - Complete Final Project Presentation

May 4th - Complete Final Project Report

References

- [1] Quader, Nahid & Gani, Md. & Chaki, Dipankar & Ali, Md. *A Machine Learning Approach to Predict Movie Box-Office Success*. Reading, Bangladesh, 2018.
- [2] Sharda, Ramesh & Delen, Dursun *Predicting box-office success of motion pictures with neural networks*. Expert Systems with Applications. 30. 243-254. 10.1016/j.eswa.2005.07.018.