

Model Prediction

Enter year: 2014

Enter duration (e.g., '2h 15m'): 2h 49m

Enter age limit (e.g., 'PG-13'): 12A

Enter number of ratings (e.g., '1.5M' or '500K'): 2.1M

Enter Metascore: 74

Predicted IMDb Rating using Gradient Boosting: 8.58582079034776

Predicted IMDb Rating using SVR: 8.600192230763284

IMDb Rating

Interstellar
2014 · 12A · 2h 49m

IMDb RATING
★ **8.7**/10
2.1M

Model Prediction

Enter year: 2019

Enter duration (e.g., '2h 15m'): 2H 2M

Enter age limit (e.g., 'PG-13'): 15

Enter number of ratings (e.g., '1.5M' or '500K'): 1.5m

Enter Metascore: 59

Predicted IMDb Rating using Gradient Boosting: 8.311880771002825

Predicted IMDb Rating using SVR: 8.307152910554466

IMDb Rating

Joker
2019 · 15 · 2h 2m

IMDb RATING
★ **8.4**/10
1.5M

Model Prediction

Enter year: 2024

Enter duration (e.g., '2h 15m'): 2h 46m

Enter age limit (e.g., 'PG-13'): 12A

Enter number of ratings (e.g., '1.5M' or '500K'): 464k

Enter Metascore: 79

Predicted IMDb Rating using Gradient Boosting: 8.489530900357948

Predicted IMDb Rating using SVR: 7.804472702429665

IMDb Rating

Dune: Part Two

2024 · 12A · 2h 46m

IMDb RATING

★ **8.6**/10
464K

Model Prediction

Enter year: 1972

Enter duration (e.g., '2h 15m'): 2h 55m

Enter age limit (e.g., 'PG-13'): 15

Enter number of ratings (e.g., '1.5M' or '500K'): 2m

Enter Metascore: 100

Predicted IMDb Rating using Gradient Boosting: 9.190953359321306

Predicted IMDb Rating using SVR: 9.099885485874276

IMDb Rating

The Godfather

1972 · 15 · 2h 55m

IMDb RATING

★ **9.2**/10
2M

Model Prediction

Enter year: 1994
Enter duration (e.g., '2h 15m'): 1h 28m
Enter age limit (e.g., 'PG-13'): U
Enter number of ratings (e.g., '1.5M' or '500K'): 1.2M
Enter Metascore: 88
Predicted IMDb Rating using Gradient Boosting: 8.555867795826838
Predicted IMDb Rating using SVR: 8.386553208508756

IMDb Rating

The Lion King
1994 · U · 1h 28m

IMDb RATING
★ 8.5/10
1.2M

Model Prediction

Enter year: 2017
Enter duration (e.g., '2h 15m'): 1h 44m
Enter age limit (e.g., 'PG-13'): 15
Enter number of ratings (e.g., '1.5M' or '500K'): 709k
Enter Metascore: 85
Predicted IMDb Rating using Gradient Boosting: 7.953861994744806
Predicted IMDb Rating using SVR: 7.8759197698408

IMDb Rating

Get Out
2017 · 15 · 1h 44m

IMDb RATING
★ 7.8/10
709K

Model Prediction

Enter year: 2001
Enter duration (e.g., '2h 15m'): 2h 32m
Enter age limit (e.g., 'PG-13'): PG
Enter number of ratings (e.g., '1.5M' or '500K'): 862k
Enter Metascore: 65
Predicted IMDb Rating using Gradient Boosting: 8.133380721153493
Predicted IMDb Rating using SVR: 8.088320984118656

IMDb Rating

Harry Potter and the Philosopher's Stone
Original title: Harry Potter and the Sorcerer's Stone
2001 · PG · 2h 32m

IMDb RATING
★ 7.6/10
862K

Model Prediction

Enter year: 2015

Enter duration (e.g., '2h 15m'): 2h

Enter age limit (e.g., 'PG-13'): 15

Enter number of ratings (e.g., '1.5M' or '500K'): 1.1M

Enter Metascore: 90

Predicted IMDb Rating using Gradient Boosting: 8.20732338768747

Predicted IMDb Rating using SVR: 8.17693880792878

IMDb Rating

Mad Max: Fury Road

2015 · 15 · 2h

IMDb RATING

★ 8.1/10
1.1M

Model Prediction

Enter year: 2013

Enter duration (e.g., '2h 15m'): 3h

Enter age limit (e.g., 'PG-13'): 18

Enter number of ratings (e.g., '1.5M' or '500K'): 1.6M

Enter Metascore: 75

Predicted IMDb Rating using Gradient Boosting: 8.286449225528655

Predicted IMDb Rating using SVR: 8.411618712858436

IMDb Rating

The Wolf of Wall Street

2013 · 18 · 3h

IMDb RATING

★ 8.2/10
1.6M

Model Prediction

Enter year: 2009

Enter duration (e.g., '2h 15m'): 2h 42m

Enter age limit (e.g., 'PG-13'): 12A

Enter number of ratings (e.g., '1.5M' or '500K'): 1.4M

Enter Metascore: 83

Predicted IMDb Rating using Gradient Boosting: 8.095594406459025

Predicted IMDb Rating using SVR: 8.266801294343338

IMDb Rating

Avatar

2009 · 12A · 2h 42m

IMDb RATING

★ 7.9/10
1.4M

Conclusion

The comparative evaluation between Gradient Boosting and Support Vector Regression (SVR) in predicting IMDb ratings reveals that Gradient Boosting demonstrates superior predictive accuracy in a majority of cases. Specifically, in a test comprising 10 instances, Gradient Boosting provided predictions that were closer to the actual values in 6 instances, whereas SVR achieved this level of accuracy in 4 instances. This outcome suggests that Gradient Boosting may be more effective.