CS6140 Project Proposal

Topic:

Predicting Oscar Nominees: A Multiclass Classification Approach Using Machine Learning

Problem Statement:

Given a movie, predict whether it will be nominated in a specific category at the Academy Awards.

Datasets:

[Oscar nominations (Kaggle)](https://www.kaggle.com/datasets/unanimad/the-oscar-award)

[Golden Globe nominations (Kaggle)](https://www.kaggle.com/datasets/unanimad/golden-globe-awards)

[SAG Award nominations (Kaggle)](https://www.kaggle.com/datasets/unanimad/screen-actors-guild-awards)

[The Movies Dataset](https://www.kaggle.com/datasets/rounakbanik/the-movies-dataset/data?select=links.csv)

[IMDb datasets](https://datasets.imdbws.com)

Metrics:

Accuracy

Precision

Recall

F1-score

Features:

Previous Academy Award Nominations

Golden Globe/SAG Nominations

Genre

IMDb/Rotten Tomatoes rating

Studio, Production Company, Distributor (net worth, previous nominations)

Actor (sex, age, previously nominated)

Budget/Box Office and Their Ratio

Country

Motion Picture Rating (MPAA)

Month of release

Runtime

Citations:

Oscar award picture - <https://www.townandcountrymag.com/leisure/arts-and-culture/a32314940/oscars-2021-changes/>

Genre graph <https://visme.co/blog/best-picture-winners/>