CSE 5334 Project Proposal

# Movie Recommendation System

Saul Covarrubias

### Introduction

Recommendation systems are all around us, making life easier for consumers and even for expects doing research. One need not look far to find examples of recommendation systems out in the wild, from Netflix to Google's page ranking, and even the type of advertising you see as you are browsing the web.

## **Proposal**

For this project, I propose a movie recommendation system using the <u>MovieLens 20M Dataset</u>, containing over twenty-seven thousand movies, and over twenty million ratings amongst over 130 thousand users. Each of these movie titles also comes with an IMDB and TMDB identifiers from which we may pull an image component for captioning. In order to make a successful recommendation system, I intend to not only apply the concepts we have learned from the readings but also some matrix factorization techniques for recommendation systems found in the literature.

#### Website Features

Upon entering the site a user will be able to choose between finding a specific movie title, searching by movie genre, and having a personalized search custom to their movie preferences by prompting the user to rate a few movies.

#### Demand

There are similar websites incorporating such features already such as Netflix, Hulu and Amazon Prime which recommend their user movies from their own catalog. Ideally, I would want this recommendation system to not only recommend movies in this MovieLens Dataset but also to be able to tell the user what platforms has the movie they are looking for, and maybe even suggest them a movie platform that matches their movie taste.