

Vishnu V Singh 01FB16ECS451

Ayushi S Mehta 01FB16ECS465

Sanjana U 01FB16ECS478

Movie Recommendation System

Problem Statement

To recommend Movies to Users using Collaborative Filtering.

This approach builds a model from a user's past behaviour (numerical ratings given to those movies) as well as similar decisions made by other users. This model is then used to predict movie (or ratings for movies) that the user may have an interest in.

We are implementing Collaborative Filtering to recommend Movies using various ML techniques :

1. K-Nearest Neighbours
2. Matrix Factorization
3. K-Means (Content Based Filtering)
4. Artificial Neural Networks (Future Upgrades)

Dataset

MovieLens Dataset (Small) - 100,000 ratings and 3,600 tag applications applied to 9,000 movies by 600 users.

The Dataset can be downloaded at <http://files.grouplens.org/datasets/movielens/ml-latest-small.zip>

Progress So Far

- Downloaded the dataset.
- Formatted the dataset to decrease sparsity of the dataset.
- Implemented KNN algorithm for Collaborative Filtering.
- Pivoted the dataset to fit the KNN model.
- Recommendation based on the KNN model.