a Movie Recommendation System

Basri Kahveci
Burak Kocuroğlu
Christina Kirchner

Introduction

- With growing consumerism and increasing popularity of the internet, buyers are being presented with an increasing range of products.

- Offering relevant products is important for customer satisfaction and company revenues.

Problem Statement

- Obtaining recommendations from trusted sources is a critical component of the natural human decision-making process.
- Recommend relevant content from a huge collection of products.
- We aim to build a movie recommendation system.

Methodology

- Content-based filtering

  - Recommend items based on similarity between items and user's preferences

- Collaborative-filtering

  - Recommend items are those preferred by similar users

Methodology

- Different similarity measures
  - Pearson correlation, Euclidean distance, Tanimoto coefficient

- MovieLens data set
  - 100K ratings
  - 1M ratings

- Netflix Prize data set is not available online.

Evaluation

- Precision

  - How many of the recommended items are close to users' preferences?

- Recall

  - How many of the relevant items are recommended to user?

- Root Mean Square Error

  - Are predicted user ratings close to actual ratings?

Thank you

Questions?