



Practical 2: Build a movie recommender

As covered in the lecture, a recommender system is commonly used in an e-commerce or movie subscription platform to suggest relevant products or possible movie of interest to the customer. In this practical, we will build a movie recommender using the content-based method. The implementation of this simple recommender system is meant as an introduction to the topic. Students are encouraged to explore independently to understand the topic in-depth.

The content-based method analyses metadata such as genre, plot, director, actor to recommend a movie of similar plot or genre etc. It is using vector space model to represent the content and adopt cosine similarity to find the closest match for recommendation.

Content-based recommender model for movies

A Jupyter notebook (practical2_content_movie_recommender.ipynb) has been prepared to show the following steps:

- Step 1: Read in and analyse input data
- Step 2a: Data pre-processing – transforming the full names of actors and directors in single words
- Step 2b: Data pre-processing on plot – extracting keywords from the plot description
- Step 3: Create word representation – via bag of words
- Step 4: Create the model using count metrics
- Step 5: Test and run the model (recommender)

In-class Exercises:

1. What are the features used in generating the recommendation?
2. Will the recommendation change if 'genre' is included as features? Amend the program to check the recommendations.