**Chapter 1 : recommender System**

1.Introduction to Recommender system

2. Advantages of Recommender system

3. Types of recommendation system

4. Workflow of content-based recommendation :

5. Work Flow of Collaborative Filtering System :

6. Advantages and Disadvantages of Content Based Filtering

7. implementation of a content-based filtering system :

**Chapter 2 : Collaborative filtering**

1. Introduction To Collaborative Filtering (CF)
2. Measuring Similarity:
3. Cosine Distance:
4. Rounding the Data:
5. Normalizing Rating:

# Item-to-Item Based Collaborative Filtering :

# User-Based Collaborative Filtering :

## Advantages of Collaborative filtering

1. Implements

**Chapter 3 : Nearest Neighborhood**

1. Introduction To Nearest Neighbor Collaborative Filtering
2. Implements of Nearest Neighbor Collaborative Filtering

**Chapter 4 : Evaluation Metrics**

1. Introduction To Evaluation Metrics
2. M.A.E(Mean Absolute Error)/R.M.S.E(Root Mean Square Error)

/ Hit Rate/Cumulative hit rate/Rating hit Rate/User Coverage/ Novelty

**Chapter 5 : Matrix Factorization**

1. What is Matrix Factorization

## Why perform matrix factorization

## The mathematics of matrix factorization

# Types of matrix factorization

1. implement