



Book Recommendation System

A Content-Based Filtering Approach



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Introduction

1 Book Recommendation System

Suggests books to users

2 Content-Based Approach

Similarity in title, author, publisher

3 Goal

Find books similar to user interests

Methodology



Content-Based Filtering

Uses book metadata



TF-IDF Vectorization

Converts text to numerical form



Cosine Similarity

Measures book similarity



Implementation Steps

1

Data Collection & Cleaning

Remove duplicates, handle missing values

2

Feature Extraction

Combine title, author, publisher

3

Vectorization

TF-IDF to convert text

4

Computing Similarity

Cosine Similarity to find similar books

5

User Input & Recommendations

Accepts user input and suggests books

Example Usage

User Input

"Harry Potter"

Recommended Books

- The Hobbit
- Percy Jackson & The Olympians
- The Chronicles of Narnia

Challenges & Improvements

Limited Metadata

Handling books with less data

Recommendation Diversity

Improving variety of recommendations

Hybrid Filtering

Collaborative + Content-Based

Deep Learning

Improve accuracy

User Ratings

Refine suggestions



Conclusion & Questions

1

Text Similarity

Recommends books via text similarity

2

Scalable

Handles large datasets

3

Personalization

Improved with more personalization