

BOOK RECOMMENDER SYSTEM

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MOTIVATION



Where should I go for dinner tonight? -> Yelp, Google Review

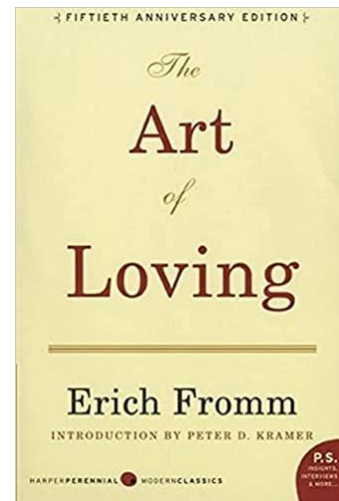
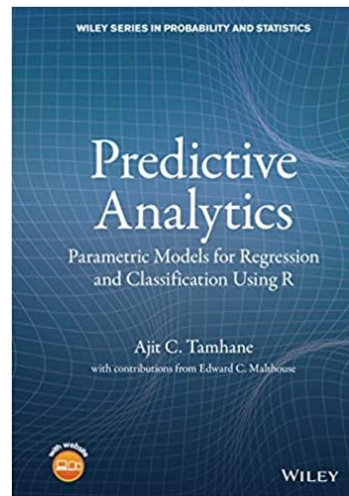
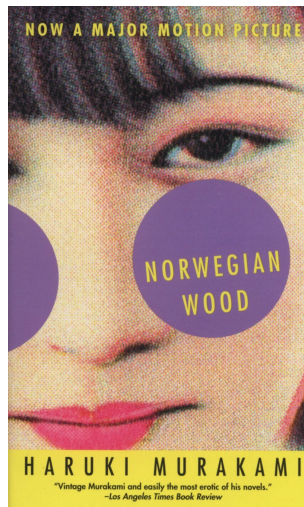
What show should I watch? -> Netflix

Which book should I read? -> NULL

HOW DOES THE APP WORK?

Given the user's *favorite book*, return **10** books from our database that the user is likely to enjoy!

Live Demo
Available [Here!](#)



DATA USED

- Top rated books from GoodReads: 22891 books, 22 features
- features includes:

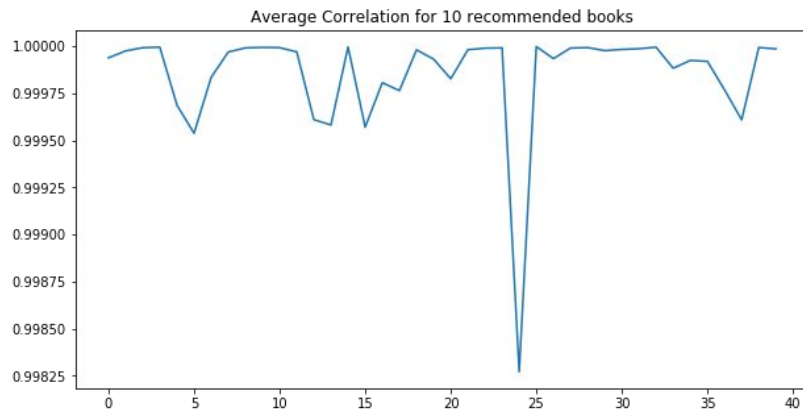
- Author Name
- Author's gender
- Author Average Rating
- Book Name
- Book Genre
- Book Average Rating
- Book Rating Count
- ...

| | author_average_rating | author_gender | author_genres | author_id | author_name |
|---|-----------------------|---------------|---------------------------------------|-----------|-----------------------|
| 0 | 4.01 | female | historical-fiction, | 74489 | Victoria Thompson\n |
| 1 | 4.15 | male | literature-fiction,mystery-thrillers, | 706255 | Stieg Larsson\n |
| 2 | 4.00 | female | romance, | 5618190 | Mimi Jean Pamfiloff\n |
| 3 | 3.88 | male | fiction,memoir, | 37871 | José Donoso\n |
| 4 | 4.10 | female | young-adult,fantasy, | 36122 | Patricia C. Wrede\n |

- Cleaned / Normalized data

ALGORITHM USED FOR RECOMMENDATION + (METRIC)

- Compare correlation among books based on:
 - Author average rating, # ratings, # reviews, book average rating, genre
- 2 Metrics: Coverage & Average Correlation
 - Randomly sampled **40** books, calculated how many books were recommended and average correlation
- **Coverage Score: 392/400 (98%)**
- **Avg Correlation: 0.99**



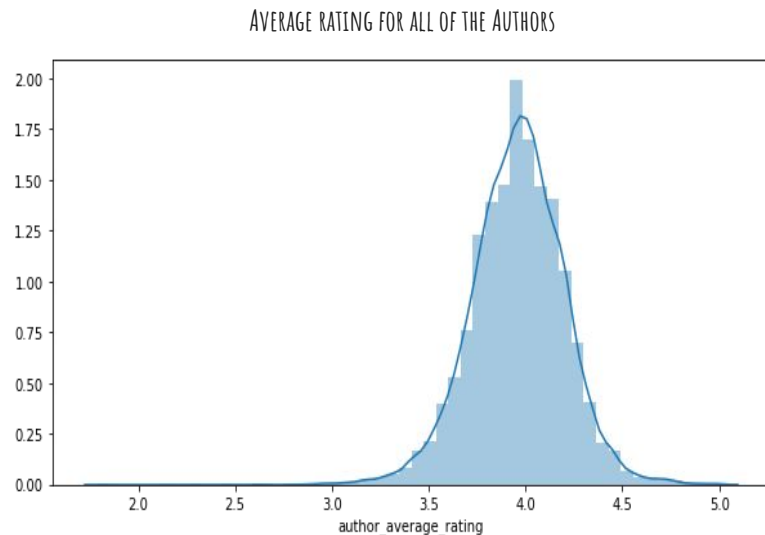
INSIGHTS / LIMITATIONS

- Insights:

- Top 5 books with most # of reviews:
 - To Kill a Mockingbird
 - The Great Gatsby
 - The Fault in our Stars
 - Pride and Prejudice
 - 1984

- Limitations:

- *Duplicate Values:*
Same book with different # pages counted multiple times
- *Correlation is too high* -> look for **different similarity measures**
- Include **more features** for higher accuracy



THANK YOU! LET'S READ MORE BOOKS!

- [LinkedIn](#)
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