



**Creating a Netflix recommendation
engine using NLP**

Background

A new video-streaming service wants to know how to recommend relevant content without storing viewer information



Methodology

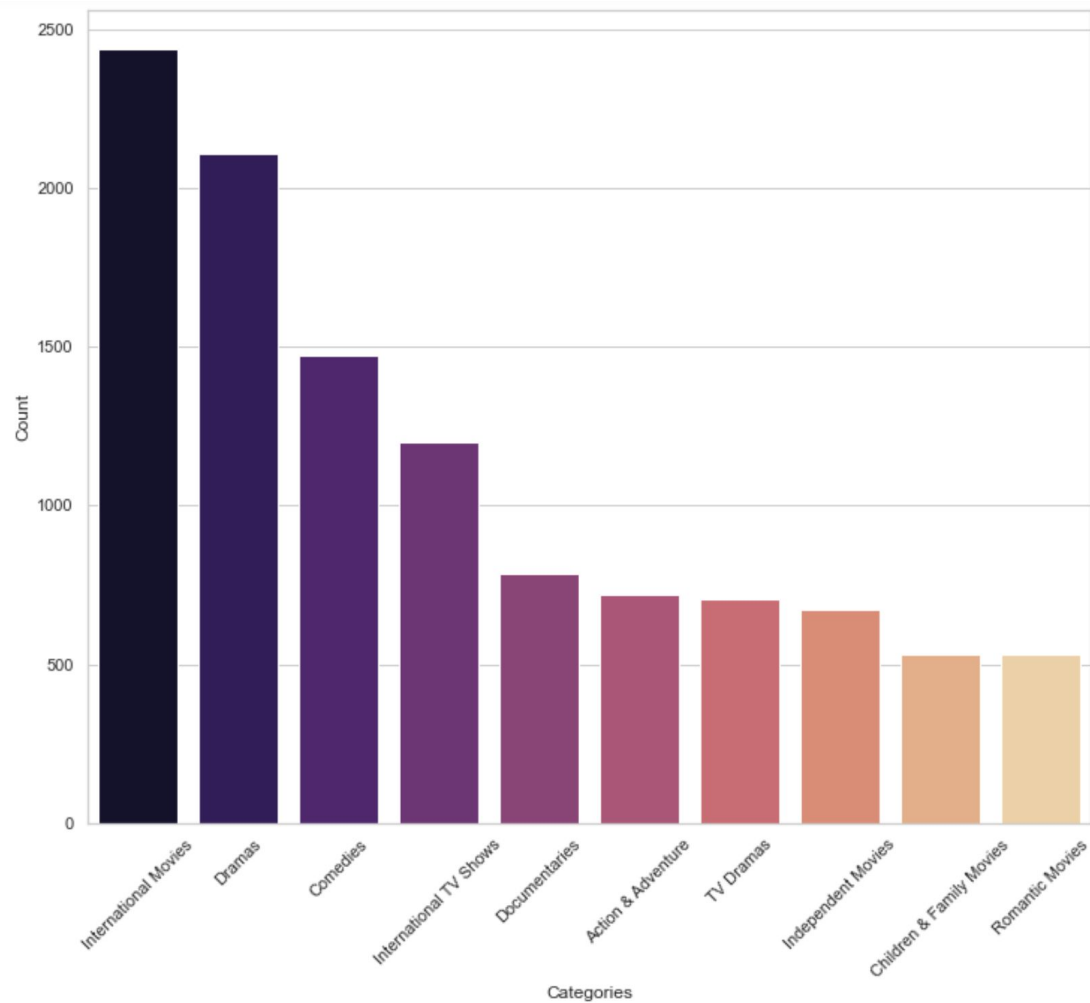
Data: <https://www.kaggle.com/shivamb/netflix-shows>

- ~8,000 TV shows and movies
- Director, actors, duration, description, etc

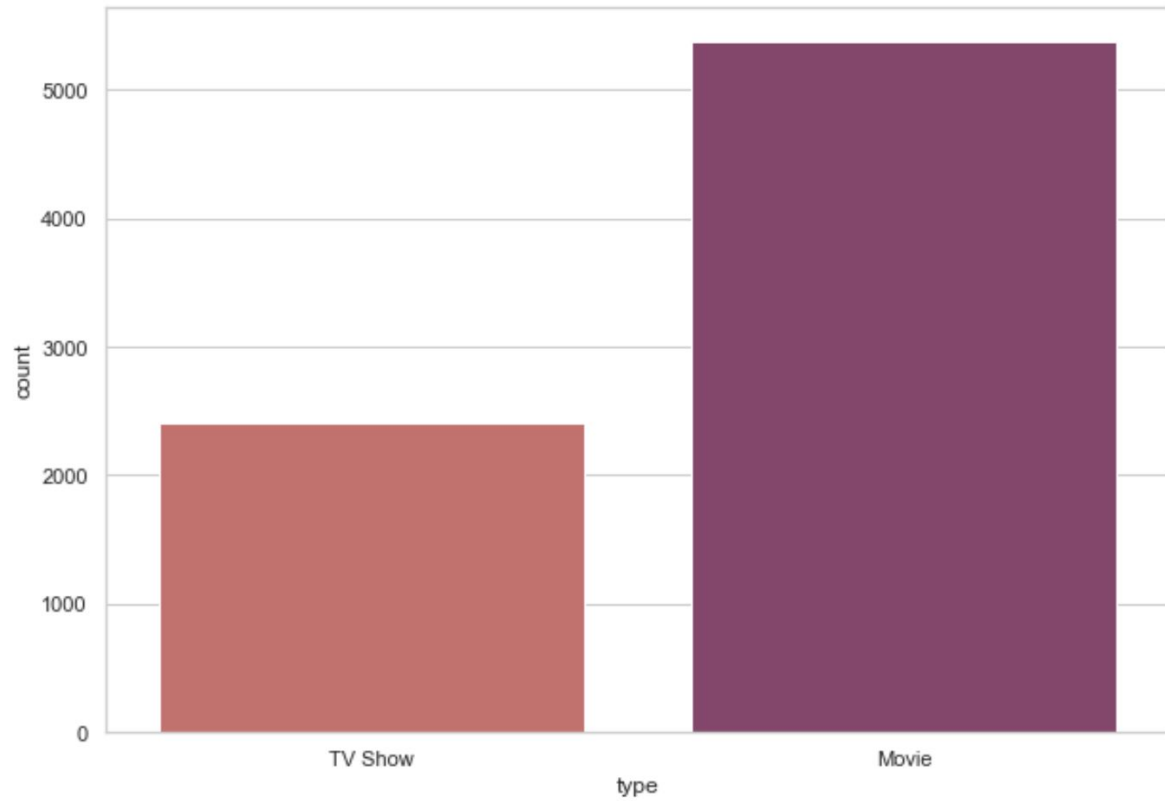
Steps:

- Preliminary analysis
- Preprocessing
- Topic modeling
- Cosine similarity → recommendation engine

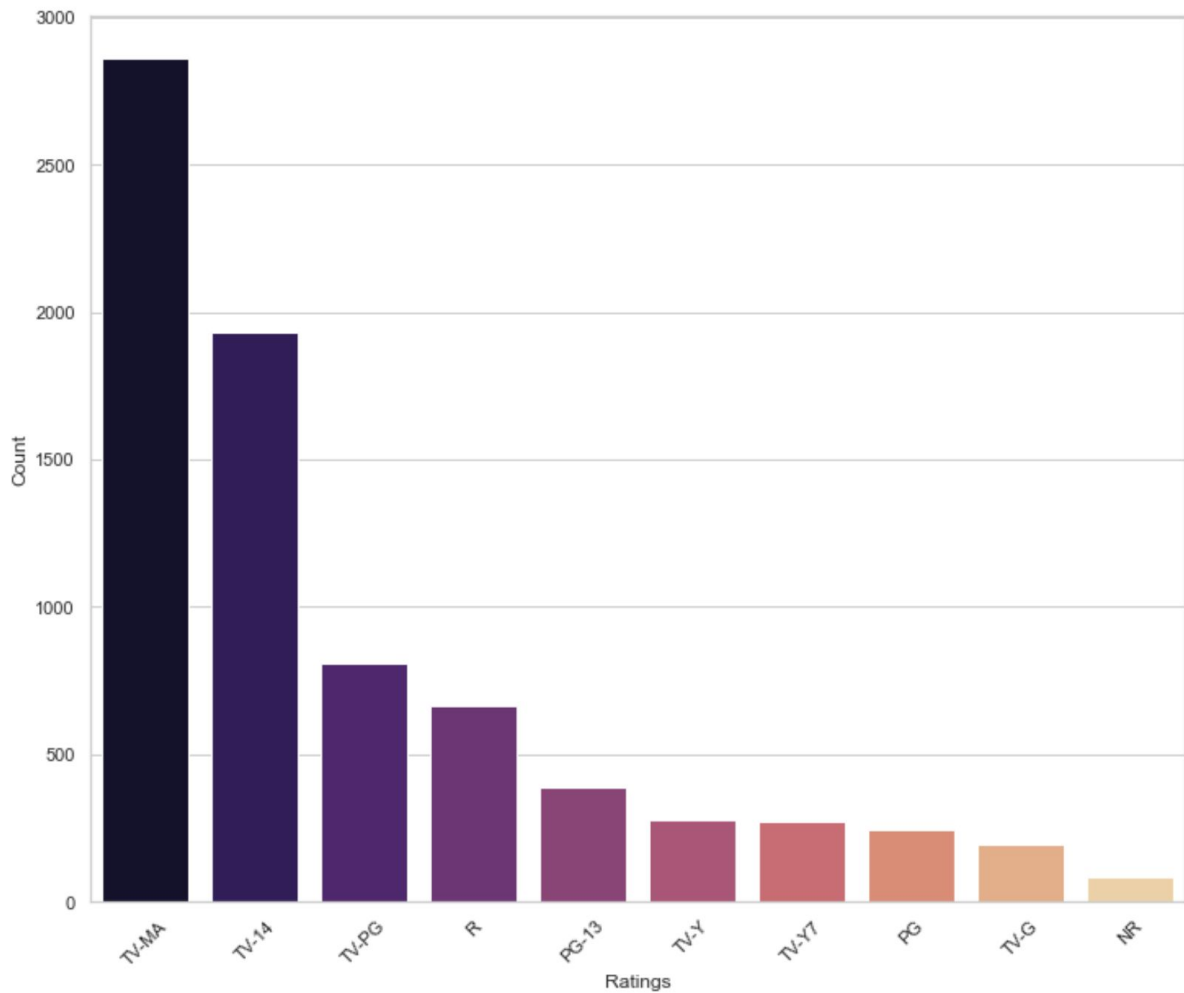
Preliminary Analysis



Preliminary Analysis



Preliminary Analysis



Recommendation Engine: Using Descriptions

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rec("The Universe")
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NOVA: Black Hole Apocalypse

Wartime Portraits

Dylan 1991

The Super Mario Bros. Super Show!

Bountiful Blessings

The Pixar Story

Learning Songs by Little Baby Bum: Nursery Rhyme Friends

Pioneers of African-American Cinema

Super Bheem

No Good Nick

Netflix Recommendation Engine

Enter the name of a netflix show or movie you like:

The Universe

Recommend

You might like:

1. The Universe: Ancient Mysteries Solved
2. Babies
3. Connected
4. Moving Art
5. Absurd Planet
6. The Surgeon's Cut
7. Tiny Creatures
8. The Beginning of Life: The Series
9. Blue Planet II
10. The Mind, Explained

Netflix Recommendation Engine

Enter the name of a netflix show or movie you like:

Atypical

Recommend

You might like:

1. Love on the Spectrum
2. Asperger's Are Us
3. The Good Neighbor
4. The Night Clerk
5. Heartthrob
6. The Stanford Prison Experiment
7. Alex Strangelove
8. The Guild
9. The Kominsky Method
10. Monster High: Haunted

Netflix Recommendation Engine

Enter the name of a netflix show or movie you like:

The 100

Recommend

You might like:

1. The Search for Life in Space
2. Rememory
3. Star Trek: Deep Space Nine
4. 3022
5. Iron Sky: The Coming Race
6. IO
7. Planet Earth II
8. Forbidden Planet
9. Lost in Space
10. Steam Team to the Rescue

Netflix Recommendation Engine

Enter the name of a netflix show or movie you like:

Narcos

Recommend

You might like:

1. Wild District
2. El Cartel
3. Narcos: Mexico
4. Dueños del paraíso
5. La Reina del Sur
6. The Great Heist
7. La Viuda Negra
8. Sin Senos sí Hay Paraíso
9. Luis Miguel - The Series
10. All For Love

Final Thoughts:

Descriptions + actors + categories + ratings = decent recommendations

Future work:

- CTM