

# Creating a Netflix recommendation engine using NLP



## Methodology

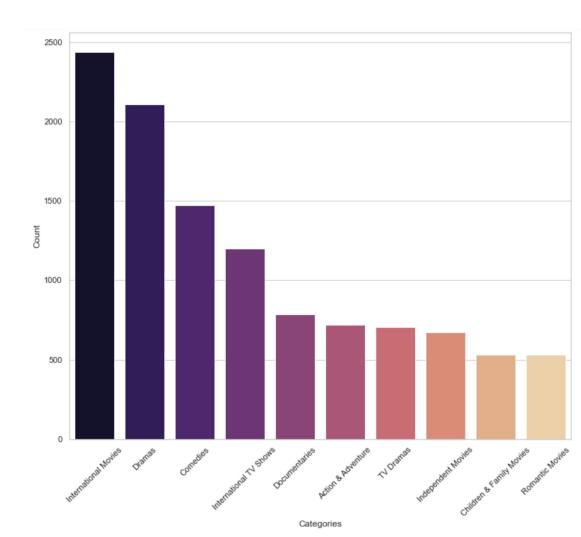
Data: <a href="https://www.kaggle.com/shivamb/netflix-shows">https://www.kaggle.com/shivamb/netflix-shows</a>

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

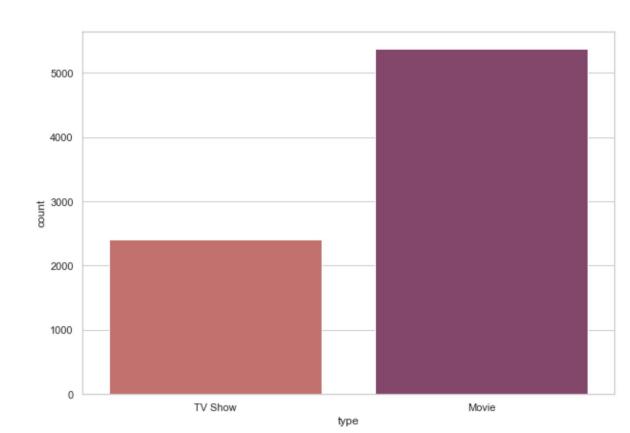
## Steps:

- Preliminary analysis
- Preprocessing
- Topic modeling
- Cosine similarity  $\rightarrow$  recommendation engine

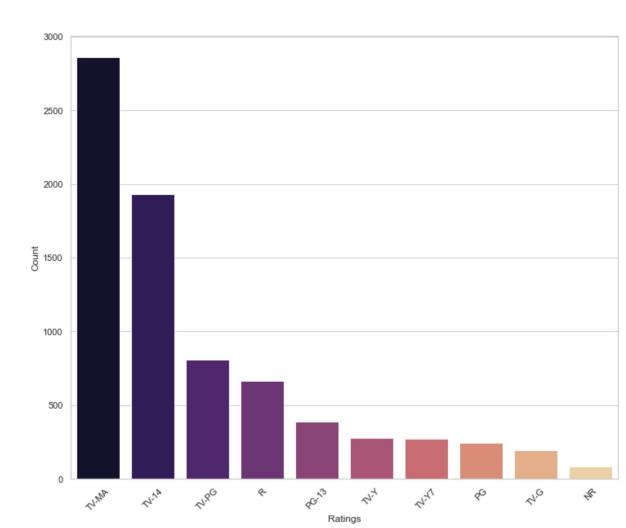
# **Preliminary Analysis**



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## **Recommendation Engine: Using Descriptions**

```
rec("The Universe")
NOVA: Black Hole Apocalypse
Wartime Portraits
Dilan 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
```

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#### **Netflix Recommendation Engine**

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

The Universe

Recommend

- 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

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#### **Netflix Recommendation Engine**

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

Atypical

Recommend

- 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

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## **Netflix Recommendation Engine**

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

The 100

Recommend

- 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

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## **Netflix Recommendation Engine**

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

Narcos

Recommend

- 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