Movie Review Scorer

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Introduction

- What and Why?

- Dataset

Challenges / Classmate Feedback

- Question Answer Task
    - Lack of detail
    - Different format of reviews

- Abstractive Summarization
    - Context window limitations
    - Poor, non-grammatical outputs

- Extractive Summarization
    - Creating cohesive thought from key words

Application From Topics In Class

- Transfer Models
    - Tokenization & Embedding
    - Cosine Similarity
    - MiniLM
    - T5-Flan

- Extractive Summarization
    - "graceful vigorously bravery sleek soulful dynamic flaws masterpiece masterful efficiently".

- Abstractive Summarization
    - A masterfully crafted masterpiece, Oscar-winning is an engrossing and lyrical meditation on the power of love."

Sampled Results

Movie Title	Top Words	Critics Consensus	Summary	Similarity Score
Avengers: Endgame	['main', 'definitive', 'action', 'finish', 'parts', 'enough', 'emotionally', 'ranks', 'rating', 'spectacular']	Exciting, entertaining, and emotionally impactful, Avengers: Endgame does whatever it takes to deliver a satisfying finale to Marvel's epic Infinity Saga.	Avengers: Endgame has enough action to satisfy fans of the franchise with its spectacular action sequences and emotional storytelling.	0.32
Fifty Shades of Grey	['fifty', 'two', 'seven', 'given', 'one', 'eight', 'grey', 'value', 'lot', 'game']	While creatively better endowed than its print counterpart, Fifty Shades of Grey is a less than satisfying experience on the screen.	Fifty Shades of Grey stars two and eight year olds as they take a chance to find out if they have what it takes to be the best of both worlds.	0.32
The Hunger Games: Catching Fire	['jennifer', 'lawrence', 'collins', 'star', 'heroine', 'guile', 'francis', 'finale', 'sparkles', 'katniss']	Smart, smoothly directed, and enriched with a deeper exploration of the franchise's thought-provoking themes, Catching Fire proves a thoroughly compelling second installment in the Hunger Games series.	Katniss is a rebellious heroine who guilelessly fights for her life while fighting for another self in the climactic finale.	0.31
Spider-Man 3	['entanglements', 'spins', 'yarn', 'stuffing', 'unbridled', 'sure', 'piece', 'tie', 'uneven', 'bi']	Though there are more characters and plotlines, and the action sequences still dazzle, Spider-Man 3 nonetheless isn't	Spider-Man 3 is a spooky yarn-filled adventure, with plenty of twists and turns.	0.29

Improvements

- Sentence-wise word embedding

- Semantic analysis and review score aggregation