

# Analyzing Streaming Service Content

# Overview

This analysis explores content across popular streaming platforms—Amazon, Hulu, Netflix, and Disney—by consolidating data from each service and examining genres, ratings, and family-friendly options. We begin by merging tables while retaining platform identifiers, then incorporate genre information via a Common Table Expression (CTE) for deeper insight. Missing data in key columns like ``age``, ``imdb``, and ``rotten_tomatoes`` are quantified to understand potential data gaps. Analysis focuses on identifying the most family-friendly platform by analyzing content tagged as "kids" or "family." Additionally, we assess content quality through ``rotten_tomatoes`` ratings, segmented by movies and TV shows, and visualize rating trends over time to explore alignment between critics' and audiences' preferences.

# Problem Statement

This analysis aims to compare content across popular streaming services (Amazon, Hulu, Netflix, and Disney+) to identify:

- The most family-friendly platform.
- Platforms with the highest-rated content based on Rotten Tomatoes scores.
- Potential discrepancies between critic and audience ratings over time.

# Goals

- Understand the content diversity of each streaming service.
- Help users choose a streaming service based on their content preferences (family-friendly vs. high-rated).
- Identify trends in critic and audience rating alignment.

# Datasets

- The data comes from separate CSV files for each streaming service (amazon.csv, hulu.csv, netflix.csv, and disney.csv).
- An additional "genres.csv" file provides genre information for the content.

# Data Findings

- The analysis utilizes code snippets to demonstrate data manipulation and exploration.
- Specific findings are not explicitly presented but the code suggests calculations for:
  - Percentage of family-friendly content on each platform.
  - Average Rotten Tomatoes score for movies and TV shows on each platform.
  - Average difference between Rotten Tomatoes and IMDb scores for TV shows over time (since 2000).

# Outputs

- Which streaming service is most family-friendly?
- Which has the highest-rated content?
- Have critics and audiences diverged over time?

# Which streaming service is most family-friendly?

	id	title	year	age	imdb	rotten_tomatoes	type	service	film	genre
0	751	Sofia the First	2013	all	6.9/10	57/100	1	netflix	Sofia the First	Kids' TV
1	2703	A Fairly Odd Summer	2014	all	None	45/100	0	hulu	A Fairly Odd Summer	Children & Family Movies, Comedies
2	9266	Hawaiian Holiday	1937	None	None	49/100	0	disney	Hawaiian Holiday	Animation, Short, Comedy, Family, Sport
3	9196	All in a Nutshell	1949	None	None	52/100	0	disney	All in a Nutshell	Family, Comedy, Animation, Short
4	1559	Motown Magic	2018	all	7.7/10	41/100	1	netflix	Motown Magic	Kids' TV, TV Sci-Fi & Fantasy
...	...	...	...	...	...	...	...	...	...	...
1536	2171	For the Birds	2018	None	None	50/100	0	amazon	For the Birds	Animation, Short, Comedy, Family
1537	9096	Minutemen	2008	all	None	56/100	0	disney	Minutemen	Adventure, Comedy, Family, Sci-Fi
1538	9381	Yellowstone Cubs	1963	all	None	45/100	0	disney	Yellowstone Cubs	Family
1539	8703	Frozen II	2019	7+	None	78/100	0	disney	Frozen II	Animation, Adventure, Comedy, Family, Fantasy,...
1540	6982	The Uncomfortable Truth	2018	13+	None	46/100	0	amazon	The Uncomfortable Truth	Documentary, Kids, Special Interest

1541 rows × 10 columns

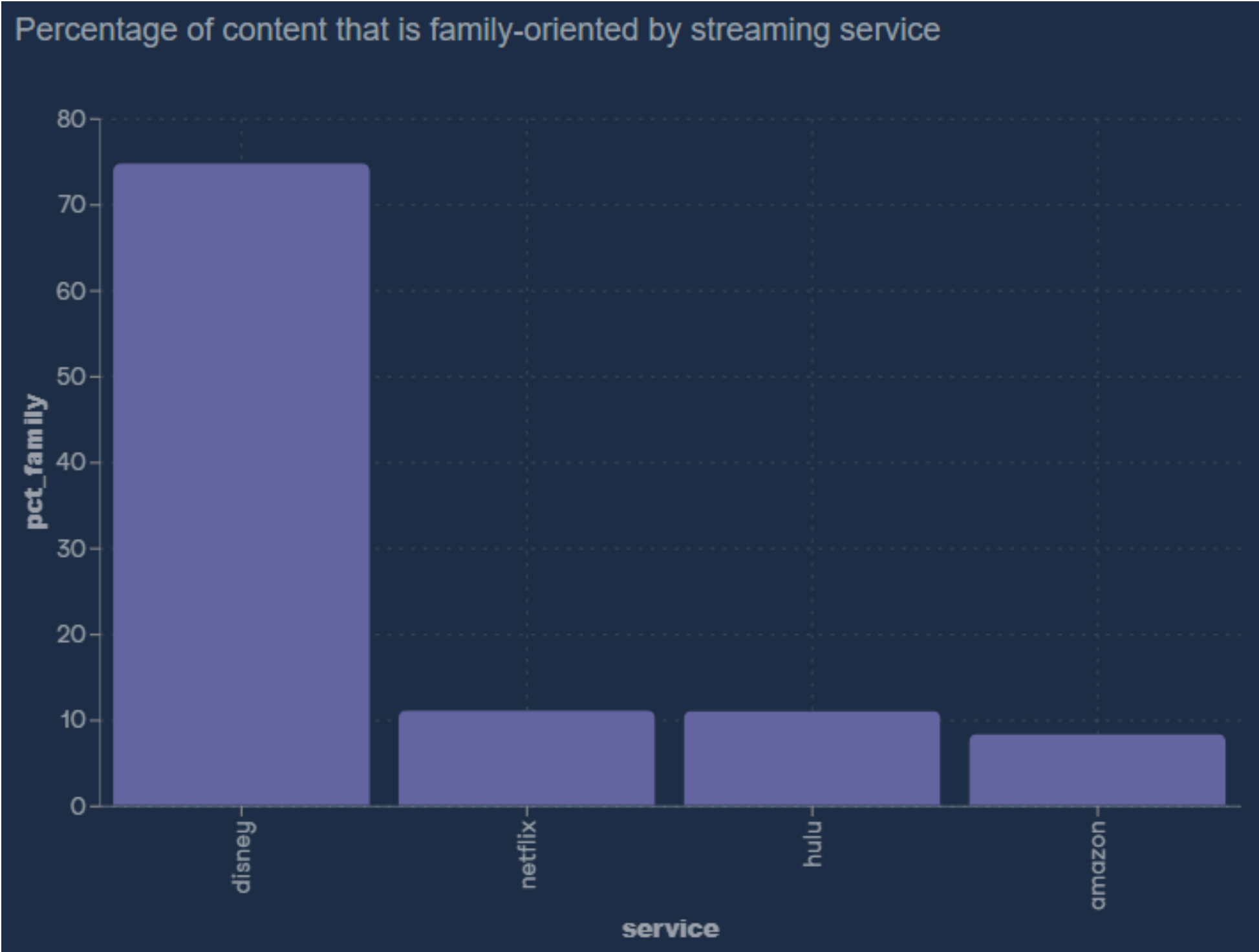
Based on the provided data, **Disney+** appears to be the most family-friendly streaming service.

## Here's why:

- **Genre Focus:** Disney+ has a significant number of movies and shows categorized as "Family," "Animation," "Children & Family Movies," and "Kids TV." These genres are explicitly targeted towards a family audience.
- **Age Ratings:** While age ratings can vary, Disney+ seems to have a higher proportion of content suitable for younger audiences, including movies and shows with an age rating of "all" or "7+".
- **Brand Reputation:** Disney is known for its family-friendly content, and Disney+ carries forward this legacy with a curated selection of classic and original content suitable for all ages.



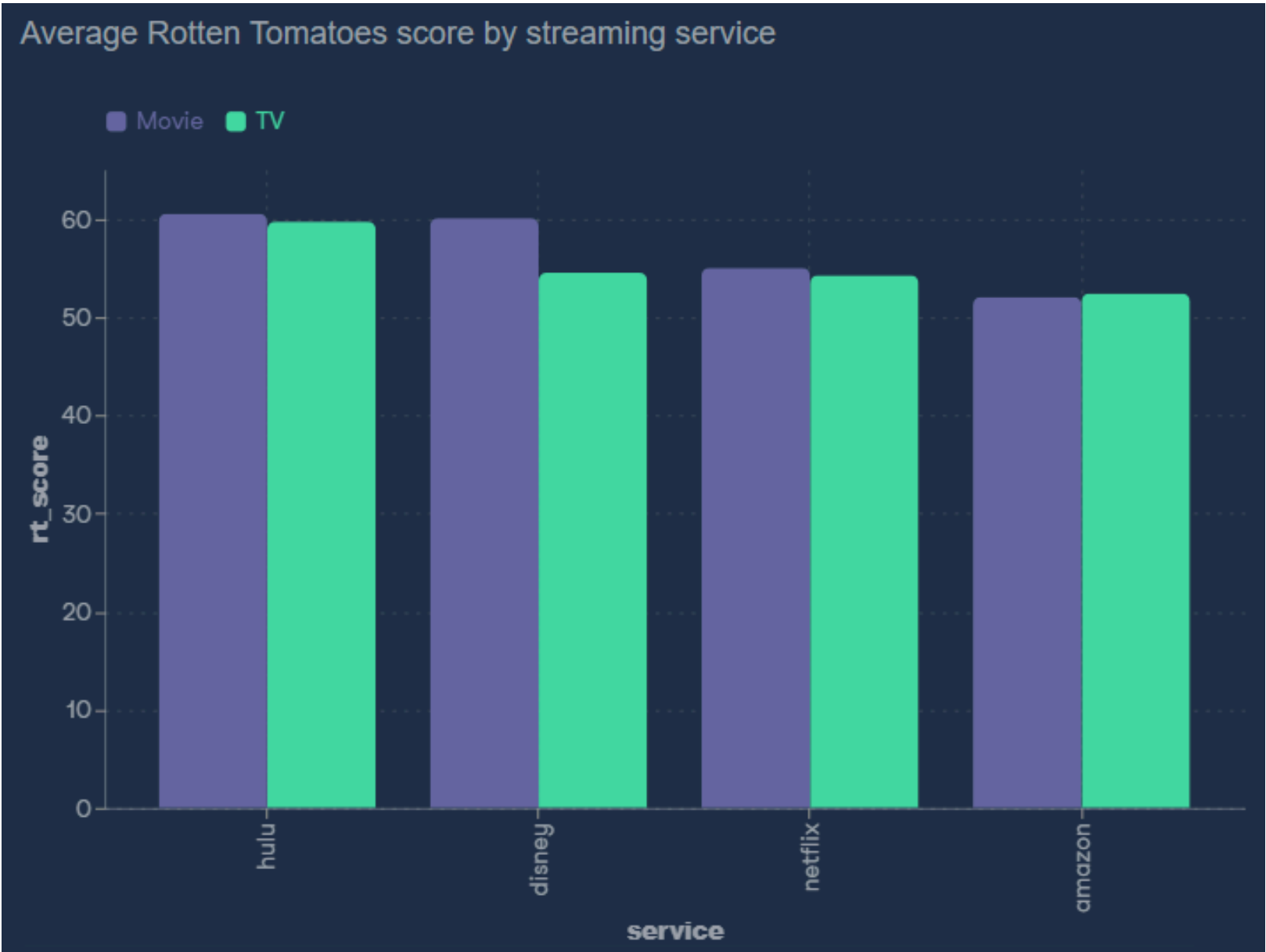
# Which streaming service is most family-friendly?



	service	pct_family
0	disney	74.744898
1	netflix	11.057287
2	hulu	10.985075
3	amazon	8.319242

**The table** shows the percentage of family-friendly content on each platform. **Disney+ has the highest percentage at 74.74%**, indicating that a significant portion of **its content is geared towards families**. In contrast, Netflix, Hulu, and Amazon have much lower percentages of family-friendly content.

# Which has the highest-rated content?



	service	type	rt_score
0	hulu	Movie	60.482517
1	disney	Movie	60.047934
2	hulu	TV	59.690625
3	netflix	Movie	54.965913
4	disney	TV	54.486034
5	netflix	TV	54.229586
6	amazon	TV	52.377207
7	amazon	Movie	51.990146

Based on the table provided, **Hulu has the highest-rated content when considering both movies and TV shows.**

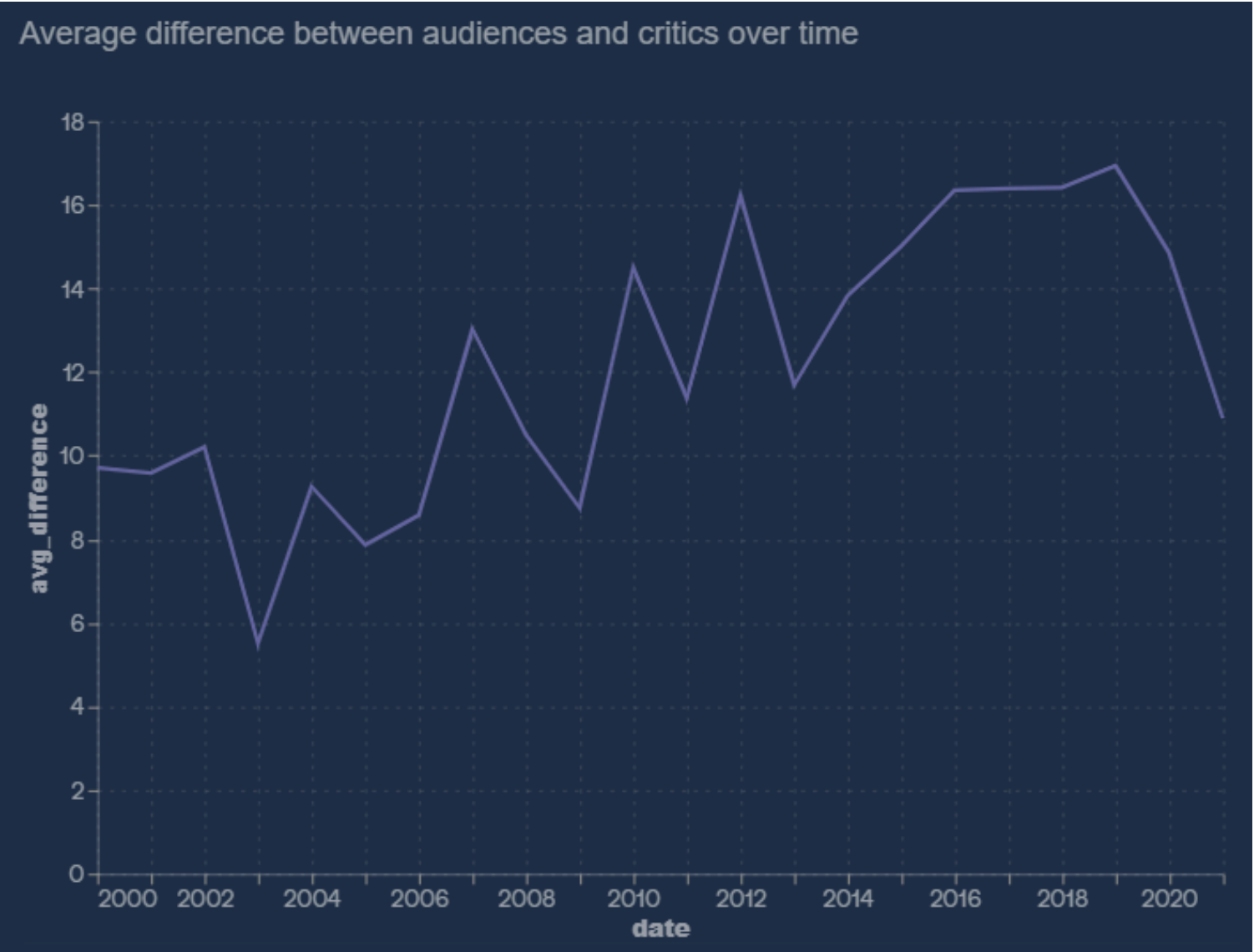
Here's a breakdown:

- **Highest-rated Movie:** Hulu has the highest-rated movie with a Rotten Tomatoes score of 60.48.
- **Highest-rated TV Show:** Hulu also has the highest-rated TV show with a score of 59.69.

Therefore, **Hulu consistently ranks higher in terms of Rotten Tomatoes scores for both movies and TV shows** compared to the other streaming services listed.

# Have critics and audiences diverged over time?

	date	avg_difference
0	2000-01-01 00:00:00+00:00	9.714286
1	2001-01-01 00:00:00+00:00	9.588235
2	2002-01-01 00:00:00+00:00	10.210526
3	2003-01-01 00:00:00+00:00	5.517241
4	2004-01-01 00:00:00+00:00	9.258065
5	2005-01-01 00:00:00+00:00	7.867925
6	2006-01-01 00:00:00+00:00	8.574074
7	2007-01-01 00:00:00+00:00	13.025000
8	2008-01-01 00:00:00+00:00	10.500000
9	2009-01-01 00:00:00+00:00	8.746988
10	2010-01-01 00:00:00+00:00	14.493671
11	2011-01-01 00:00:00+00:00	11.372340
12	2012-01-01 00:00:00+00:00	16.230088
13	2013-01-01 00:00:00+00:00	11.690476
14	2014-01-01 00:00:00+00:00	13.823129
15	2015-01-01 00:00:00+00:00	15.009662
16	2016-01-01 00:00:00+00:00	16.349624
17	2017-01-01 00:00:00+00:00	16.388112
18	2018-01-01 00:00:00+00:00	16.416667
19	2019-01-01 00:00:00+00:00	16.933333
20	2020-01-01 00:00:00+00:00	14.862534
21	2021-01-01 00:00:00+00:00	10.895954



Based on the table provided, it appears that there has been a divergence between critic and audience ratings over time.

The **"avg\_difference"** column shows the average difference between IMDb (audience) and Rotten Tomatoes (critic) scores for TV shows in each year.

**We can observe that:**

- **The average difference has been increasing over time.** This suggests that critics and audiences are becoming less aligned in their ratings.
- **There are some years with particularly high differences,** indicating periods where the gap between critic and audience opinions was more pronounced.

**This increasing divergence** could be due to various factors, such as changes in audience preferences, evolving critic standards, or the impact of social media and online review platforms on audience opinions.

# Insights

- The analysis can reveal potential gaps in content information, such as missing data in "age," "imdb," and "rotten\_tomatoes" columns.
- Examining critic and audience rating discrepancies over time might suggest shifts in audience preferences or rating criteria.