

YOUTUBE TRENDING VIDEO ANALYTICS – INDIA VS US

Objective:

To uncover actionable insights from trending YouTube videos across India and the US by analyzing sentiment, viewership patterns, timing, and engagement.

Tools Used:

- **Python** – Data cleaning, sentiment analysis using VADER
- **PostgreSQL (pgAdmin)** – SQL-based category ranking
- **Tableau** – Visual storytelling & interactive dashboard

Dataset:

- Source: [Kaggle Trending YouTube Data (INvideos.csv & USvideos.csv)]
- Combined 40,000+ records across 2 countries

Data Processing:

- Merged India & US datasets
- Cleaned nulls & duplicates
- Extracted Publish Day, Publish Hour
- Performed sentiment analysis on titles (Positive, Neutral, Negative)

INSIGHTS & VISUAL SUMMARY

Key Insights

- **Top Categories:**
 - Entertainment and Music receive the highest average views across both countries.
- **Best Time to Publish:**
 - 6–9 PM (local time) on weekdays yields the most engagement.
- **Sentiment Impact:**
 - Titles with **positive sentiment** received higher views compared to neutral or negative ones.
- **India vs US Comparison:**
 - US videos had higher overall likes, but Indian videos had more consistent average views across categories.
- **Trending Pattern:**
 - Trending views grew steadily over time, with notable spikes during weekends and holidays.
- **Top Channels by Views:**
 - A few dominant channels regularly appear in the top-viewed category, showing strong brand recall.

Visuals Included:

1. **Bar Chart:** Avg. Views by Category and Country
2. **Pie Chart:** Sentiment Distribution by Views
3. **Heatmap:** Best Time (Day vs Hour) to Publish
4. **Line Chart:** Viewership Trend Over Time
5. **Side-by-Side Bar:** Likes vs Dislikes by Country
6. **Treemap:** Top Channels by Total Views

Conclusion:

This project offers creators, brands, and marketers a data-backed blueprint to optimize **video timing, content tone, and category focus**. The final dashboard makes these insights highly interactive and actionable.