# Movie Coast Guard

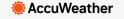
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#### **Problem**

- Piracy in the movie industry has been steadily increasing
- There are not many tools available for tracking, control and statistics regarding it

### Goals

- Gather information from torrents, including their peers, and subsequently their consumption patterns
- Make a comparison with relevant values such as the movie's production budget and box office
- Create a timeline















## Approach

- Get the top 100 most torrented movies and extract relevant info (info hash, seeders and their IPs, geographical location)
- Gather relevant info from movies that the user provided
- Build a dataset with aforementioned information
- Cross reference with the information that was previously gathered and the OpusData dataset and try to answer the questions:
  - What makes a movie more likely to be pirated?
  - What is the impact of piracy in the movie industry?







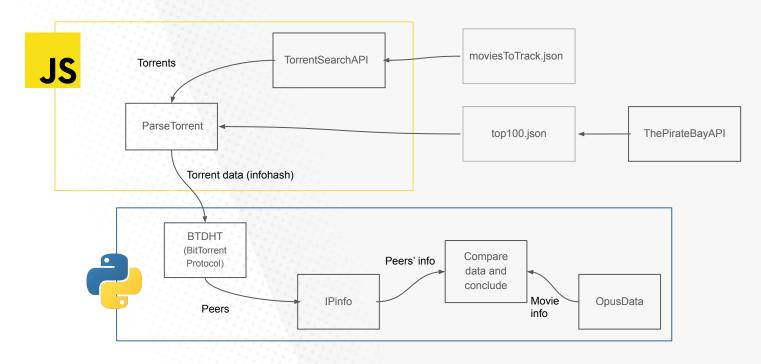








### Architecture

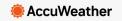
















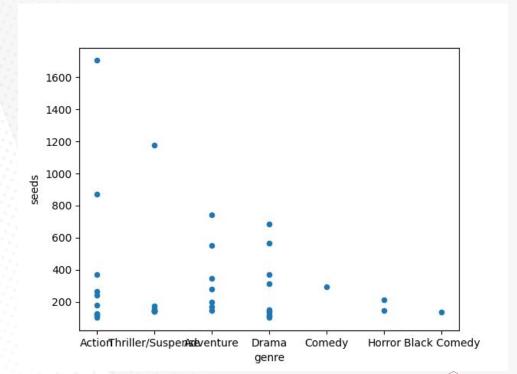
# What makes a movie more likely to be pirated?

#### Genres:

- Action
- Drama

#### Peak seeders:

• 1600

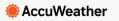












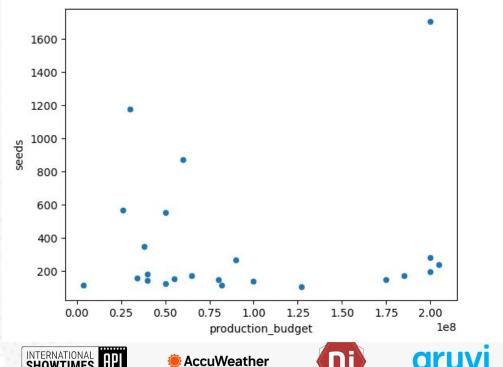




## What makes a movie more likely to be pirated?

#### **Production Budget:**

Unclear whether it is relevant or not

















# What is the impact of piracy in the movie industry?

Avg. revenue lost:

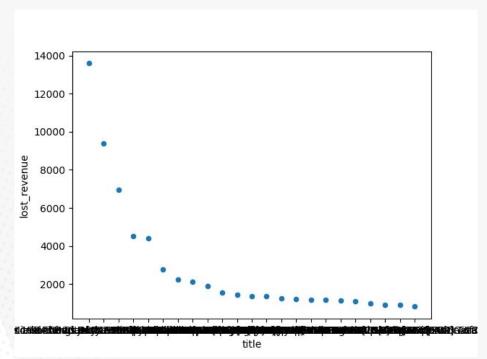
• 2,794\$

Peak revenue lost:

• 14,000\$

Note: based on 2014 avg ticket

price

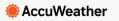














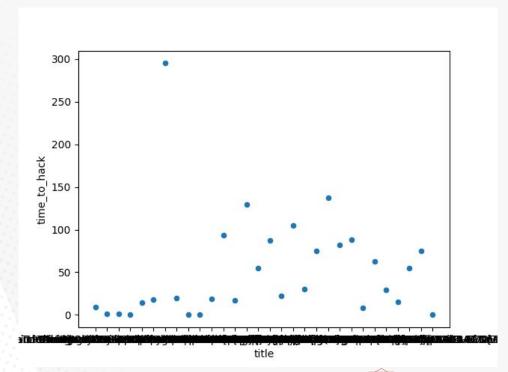


# What is the impact of piracy in the movie industry?

Avg. Time to hack:

• 51 days

Note: it is very difficult to know the first upload date of a torrent

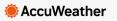
















#### Possible Issues

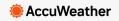
- VPN
  - The conclusions may not be accurate due to the fact that some users might be using VPNs
- Downloaded != Viewed
  - There's no way to ensure that a user has actually seen what they downloaded. It is only possible to know if the peer finished downloading the torrent (thus becoming a seeder). Using the same logic, a single download can be shared with/seen by multiple users
- Counting the exact number of downloads
  - It is only possible to take into consideration users that are either downloading the torrent, or have finished downloading it and are still seeding it
- Average Movie Ticket Price
  - The database that we found has data from 2014
- Lack of data
  - Specially for recent movies















#### **Future Work**

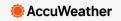
- Periodically running server:
  - Make our code run periodically and store data about each torrent, in order to create a timeline
  - Count the number of distinct seeders of each torrent to get the total number of downloads
- Cross reference location:
  - Cross our data with the locations we found
  - Due to lack of time we could not measure downloads per location and, subsequently, their impact















# OvercookingSpaghette

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# Thank you for your time!









