



Collecting and Analyzing Reddit Data Best Practices

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Agenda

- Overview of Reddit
- How to Get Data
- Importing into ORA



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What is Reddit?

- Reddit is the 6th most popular website in the USA with users averaging 11 minutes and 28 seconds on the site every day.
- Globally it's the 20th most visited site in the world.
- Users are 71% male, and 59% are between the ages of 18 and 29.
- Users are highly reliant on the platform for news.
 - 45% of all Reddit users reported "learning something about the presidential campaign or candidates on the site in a given week"

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How do users interact with Reddit?

- Over a million distinct subcommunities, called subreddits, exist.
- Community members can 'upvote' or 'downvote' new content.
- 'Karma' is a sum of a user's post and comment scores.
- Posts can be 'gilded' by users for money.
- A post or comment's 'score' is the number of upvotes it receives minus its downvotes.

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What makes Reddit unique?

- Moderation
 - Each subreddit has moderators that enforce community standards for posts

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Example Interactions

COMMUNITY DETAILS

r/pittsburgh

53.7k Subscribers 439 Online

Community curated front page of Pittsburgh's place on the internet. [Share] (/r/pittsburgh/submit) news, events, and thoughts with/about the Pittsburgh community.

SUBSCRIBED

CREATE POST

COMMUNITY OPTIONS

Even 60mph winds can't take out the most solid structures in the Burgh.

furbergher 157 points · 7 days ago

No amount of high winds can knock over yinzer entitlement.

Reply Give Award Share Report Save

winbooby2019ms 48 points · 7 days ago

They took so much time to shovel out that space

Reply Give Award Share Report Save

furbergher 32 points · 7 days ago

Yinzers: "People are entitled these days!"

Also Yinzers: "Don't you dare move my parking chair!"

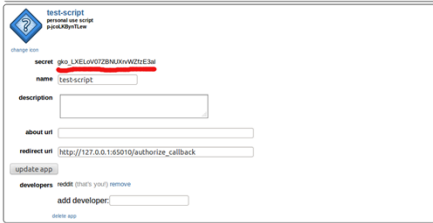
Reply Give Award Share Report Save

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The Reddit API

- First must read the terms and register to use the API
- API data format comes out as a JSON
 - One JSON per post or comment
- Can use wrappers (like praw or PushShift for Python).



```
import praw

reddit = praw.Reddit(client_id="my client id",
                    client_secret="my client secret",
                    user_agent="my user agent")
```

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Type of Data to Pull

- Get all of the posts (Submissions) from a given subreddit from the past 30 days
 - Get post title, score, id, url, number of comments, author, score
- Get all posts from a given Redditor
- Obtain all comments to a set of posts
 - Get comment author, time, score, text

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Reddit Networks

- User x Subreddit
- User x Post
- User x User
- ...

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Walking through API using PushShift

```

1 import pandas as pd
2 import requests
3
4 def get_pushshift_data(data_type, **kwargs):
5     base_url = f"https://api.pushshift.io/reddit/search/{data_type}/"
6     payload = kwargs
7     request = requests.get(base_url, params=payload)
8     return request.json()
9
10 data_type="submission"
11 query="coronavirus|coronavirus|wuhan virus|wuhanvirus|2019CoV|NCoV|NCoV2019|covid-19|covid19|covid 19"
12 size=1000

```

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Pulling Data with Pushshift

```

14 count = 0
15 all_data = []
16 while count < 48:
17     count += 1
18     print(f"now printing hour in the past {count}")
19     hour = f"{count}h"
20     data = get_pushshift_data(data_type=data_type, before=hour, size=size, q=query)
21
22     all_data.extend(data["data"])
23
24     df = pd.DataFrame(all_data)
25     print(df)
26
27     pd.DataFrame(df).to_csv(f"corona_posts_{count}.csv", encoding="utf-8")
28

```

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Uploading Data into Ora

- ▼ Import other data formats
 - ✎ JSON data
 - ✎ Twitter data
 - ✎ Blogtrackers data
 - ✎ GitHub data
 - ✎ YouTube data
 - ✎ Talkwalker data
 - ✎ Pulse data
 - ✎ NexaIntelligence data
 - ✎ VK data
 - ✎ Survey Monkey data
 - ✎ Shapefile data
 - ✎ Bibliography & Citations data
 - ✎ TAVI data
 - ✎ THINK data
 - ✎ **Reddit data**

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