

Capstone Project Proposal

Using Spotify Web API and web-scraping
to map artist birth places



Research Question(s)

Main Questions:

Do spatial clusters emerge in music streaming patterns based on the geographic origin of artists?

If spatial clusters do emerge, what are some of the historical and socioeconomic attributes associated with them?

Methods

1. Analyzing Spotify Data via the Spotify API
2. Collecting Artist Birthplace Information
3. Plotting Data Points
4. Hierarchical Cluster Analysis



Spotify Data

- Spotipy Library in Python
- Data available from Spotify API



spotipy-dev/ spotipy

A light weight Python library for the Spotify Web API

176

Contributors

28k

Used by

5k

Stars

938

Forks

Spotify for Developers

Documentation

Community

Web API

- Overview
- Getting started
- Concepts
- Tutorials
- How-Tos

REFERENCE

- Albums
- Artists
- Audiobooks
- Categories
- Chapters
- Episodes
- Genres
- Markets
- Player

Web API • References / Tracks / Get User's Saved Tracks

Get User's Saved Tracks OAuth 2.0

Get a list of the songs saved in the current Spotify user's 'Your Music' library.

Authorization scopes
user-library-read

Request

GET /me/tracks

Response 200 401 403 429

Pages of tracks

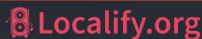
href string Required

A link to the Web API endpoint returning the full result of the request

Example: "https://api.spotify.com/v1/me/shows/offset=0&limit=20"

Birthplace Data

- Localify dataset
- Web-scraping the Google Knowledge Panel
- Other web scraping methods



Find Your Favorite Local Artists and Events

Get personalized music recommendations and discover local artists and events in your area. Explore a wide range of genres and find new music experiences that match your taste.



Personalized

Receive tailored music recommendations based on your current favorite artists.

[Get Your Recommendations >](#)



Local Events

Stay updated on upcoming local concerts, festivals, and music-related events near you.

About



21savage.com



Shéyaa Bin Abraham-Joseph, known professionally as 21 Savage, is a UK-born American rapper. Born in London and raised in Atlanta, Georgia, he began his recording career in 2013 and released three independent mixtapes to regional acclaim. [Wikipedia](#)

Born: October 22, 1992 (age 31 years), Newham University Hospital, London, United Kingdom

Full name: Shéyaa Bin Abraham-Joseph

Movies: [The Trap](#), [American Dream: The 21 Savage Story](#), [MORE](#)

Height: 6' 0"

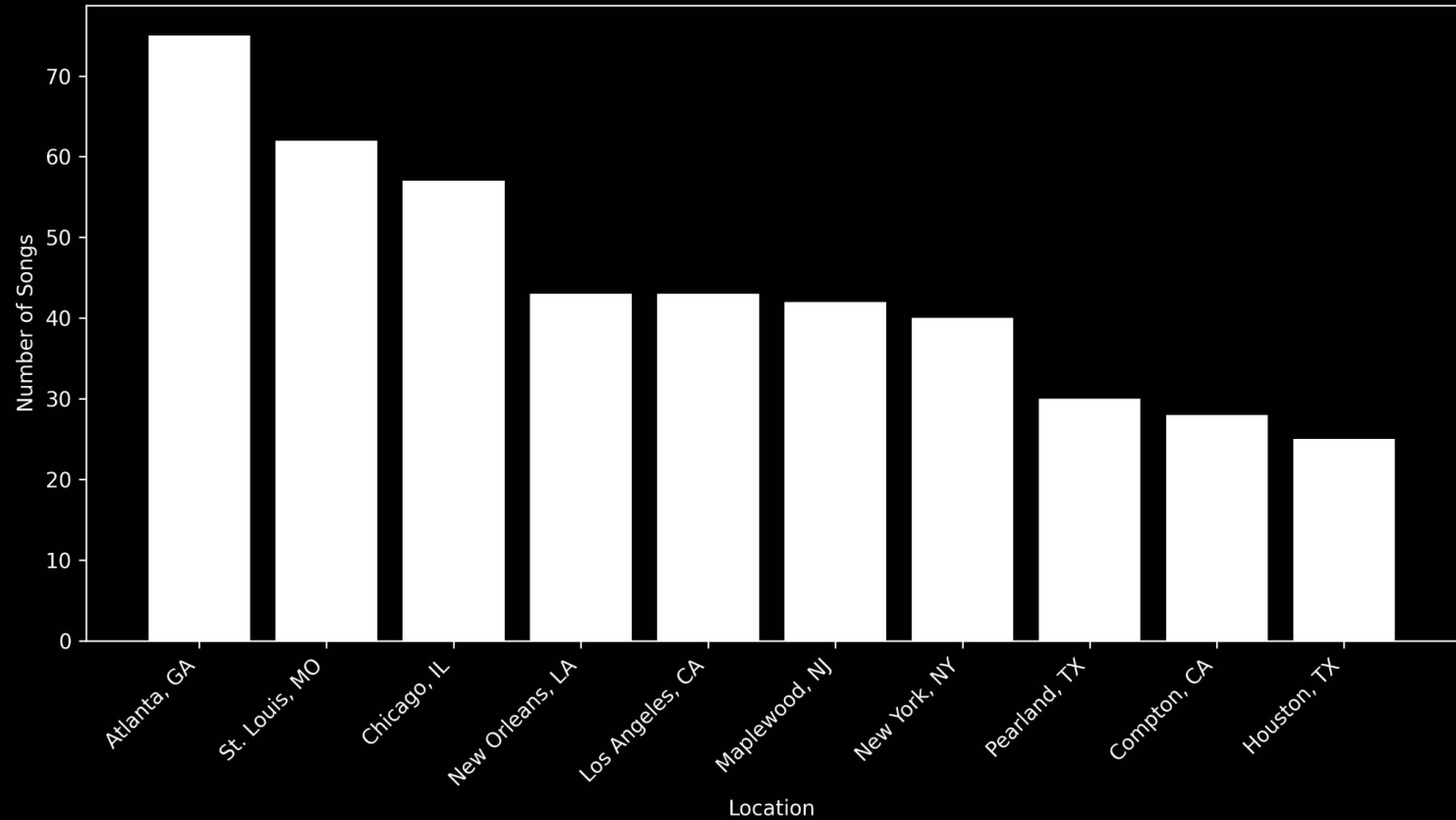


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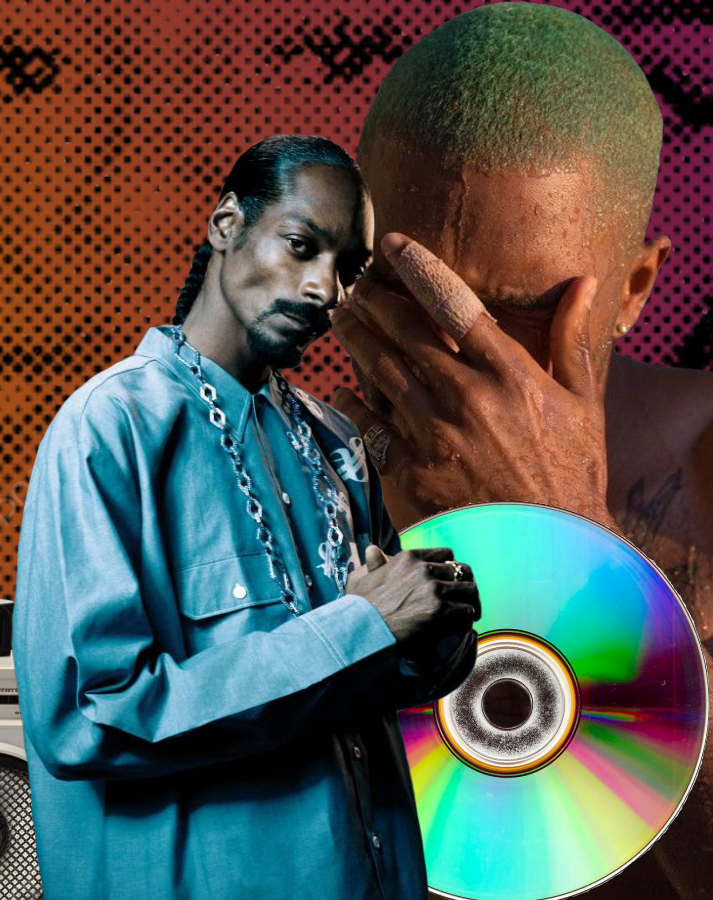


Number of Songs by Artist Birthplace (Top 10)



Mapping Artist Origin

1. Geocode Locations
2. Click this Link to
View Your Map!



User Takeaways

What happens if we
filter my data for songs
categorized as drill?

VICE

Life

The Secret History of Drill

How Chicago pioneered a sound that spread to the UK and the rest of the world, as told by the people who were there.

VICE

UK drill's influence can be heard in burgeoning scenes from Albania to Australia, Ireland and Kenya, but its most remarkable – not to mention unexpected – impact lies across that famous bridge in good ol' NYC. While current critics tip the nearby house-fuelled Jersey club sound as drill's hippest new manifestation, it's Brooklyn that has set the scene for what is arguably its most historic revelation.

BK's three biggest drill rappers, Fivio Foreign, Sheff G and the now-deceased Pop Smoke, all ended up almost exclusively employing the same three (barely acquainted) northeast London producers to supply a distinct breed of beat that has fuelled the borough's ascendance in the genre.

Next Steps

1. Actually publishing the site
2. Cluster Analysis

References

Hodgson, J. (2023, July 25). The secret history of drill. VICE.

<https://www.vice.com/en/article/4a3x3m/secret-history-drill-music>