




Lifestyle Impacts of COVID-19: Tech Review

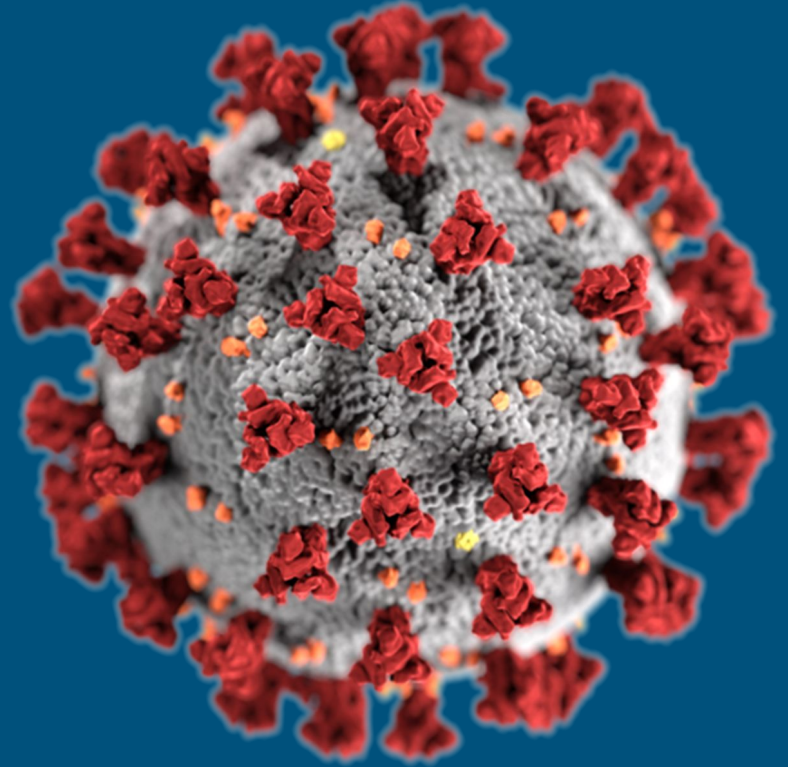


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Background

- Trends related to COVID-19
- Interactive Visualization
- Extraction



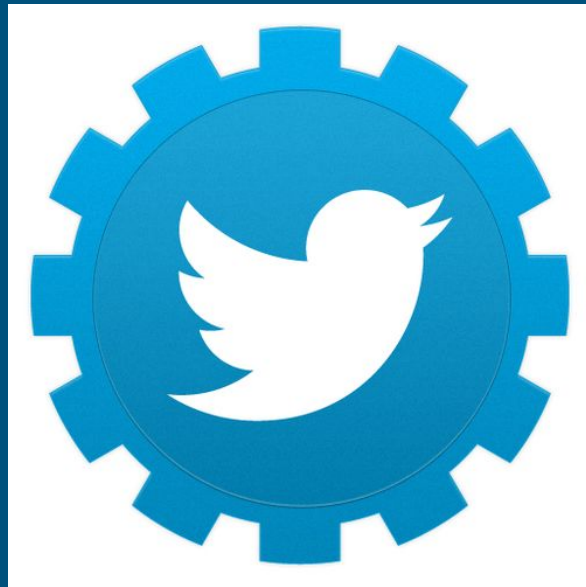
Use Case: Dog Ownership



- Interested in getting a dog
- How much more popular are they now as compared to before COVID-19 hit?

Python Libraries

- Tweepy
 - Twitter API
 - Needs authentication
 - User-specific info
 - Write capabilities
 - Tweet samples
 - Fixed list of trends



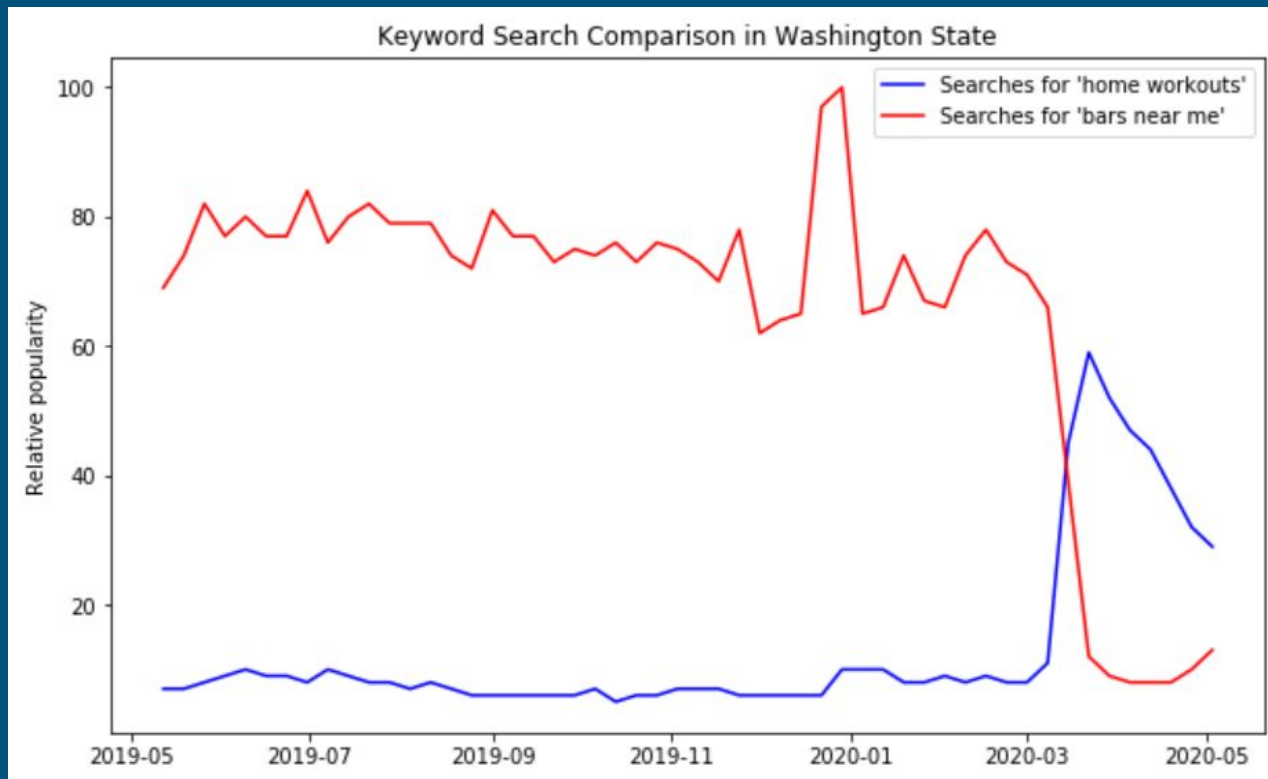
Python Libraries



Pytrends

- Google Trends time series
 - Keyword search
 - Facets for region, category
 - Top trend lists
 - By day, by year
 - Suggested searches
 - Inputs:
 - Category of data
 - Date range
 - Outputs pandas dataframes
 - Weekly digest
- Inputs:
 - Category of data
 - Date range
 - Key word(s)
 - Geographical or language argument
 - Outputs pandas dataframes or dictionaries

Pytrends example



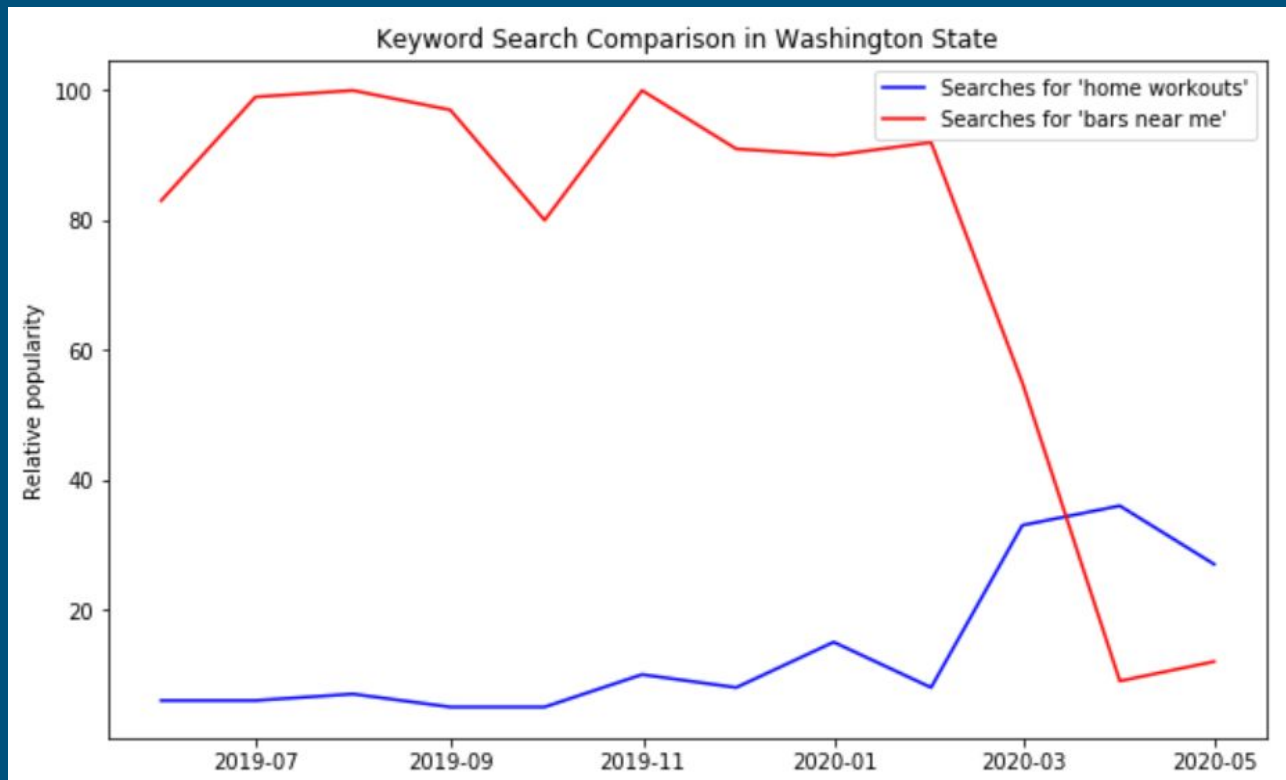
Python Libraries



GSVI

- Google Trends time series
 - Keyword search
 - Facets for region, category
 - Multivariate queries
 - Outputs pandas dataframes
 - Can specify granularity of data (daily, monthly, hourly) but no weekly data
- Inputs:
 - Connection to Google
 - Query keyword(s) and corresponding geographic areas
 - Start date
 - End date
 - granularity
 - Outputs timeseries

GSVI example



Library Comparison

	Pytrends	GSVI
Feature set	X	
Documentation	X	
Multiple Keywords	X	X
Time range	X	X
Adjustable granularity		X
Scalability		X
Final Selection	X	