# demo api usage

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# 0.1 DOCUMENTATION

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## **PURPOSE**

Demonstrate usage of the Google Search Results API with python SerpAPI Wrapper.

#### **DEPENDANCIES**

A valid secret\_api\_key must be obtained through https://serpapi.com/.

\*\*\* #### INSTALLS

```
[19]: #pip install requests #pip install google-search-results
```

Development Notes: google-search-results documentation: https://pypi.org/project/google-search-results/ serpapi google-search-results python wrapper documentation: https://github.com/serpapi/google-search-results-python

API KEY needed to move forward: The next block of code WILL NOT EXECUTE unless the code is updated to include a valid SerpAPI key. An API key is free for a 15-day trial period and can be obtained by visiting https://serpapi.com/

\*\*\* #### IMPORTS

```
[1]: import pandas as pd
  import requests
  import json
  from serpapi import GoogleSearch
  import api_config_file
```

\*\*\* #### VARIABLES

```
[2]: api_key = api_config_file.api_key
```

```
[3]: search_param_var = "barista new york"
```

```
[6]: # hard-coded job id value for demo purposes only
job_id = api_config_file.job_id
```

# Execute a call to Google Jobs API

```
[4]: params = {
       "engine": "google_jobs",
       "q": search_param_var,
       "hl": "en",
       "api_key": api_key
[8]: search = GoogleSearch(params)
     results = search.get_dict()
     jobs_results = results['jobs_results']
     df = pd.DataFrame(jobs_results)
[9]: df.head()
[9]:
                                      title
                                                             company_name \
     0
                                    Barista
                                                                       RH
     1
                                    Barista
                                                                    VERSA
     2
                                    Barista Irving Farm Coffee Roasters
     3
       Experienced Barista @ Merriweather
                                                            Merriweather
     4
                                    Barista
                                                              Cafe Grumpy
                       location
                                                       via
                                                            \
                   New York, NY
     0
                                              via LinkedIn
       New York, NY (+1 other)
                                       via Culinary Agents
     1
     2
                   New York, NY
                                       via Good Food Jobs.
                   New York, NY
     3
                                  via New York Coffee Jobs
     4
                   New York, NY
                                       via Culinary Agents
                                               description \
      Job Description\n\nRH is seeking a Barista to ...
     1 VERSA is seeking an energetic and capable indi...
     2 JOB DESCRIPTION\n\nBaristas are responsible fo...
     3 Merriweather Coffee + Kitchen, a busy independ...
     4 We are looking for full-time and part-time bar...
                                                 thumbnail \
     0 https://encrypted-tbn0.gstatic.com/images?q=tb...
     1 https://encrypted-tbn0.gstatic.com/images?q=tb...
     2 https://encrypted-tbn0.gstatic.com/images?q=tb...
     4 https://encrypted-tbn0.gstatic.com/images?q=tb...
     0
             [1 hour ago, Part-time, No degree mentioned]
```

```
1
                                    [3 days ago, Full-time]
      2
                              [Over 1 month ago, Part-time]
      3
               [1 day ago, Full-time, No degree mentioned]
         [29 days ago, 17 an hour, Full-time, No degree...
                                        detected_extensions \
      0 {'posted_at': '1 hour ago', 'schedule_type': '...
      1 {'posted_at': '3 days ago', 'schedule_type': '...
      2 {'posted_at': 'Over 1 month ago', 'schedule_ty...
      3 {'posted_at': '1 day ago', 'schedule_type': 'F...
      4 {'posted_at': '29 days ago', 'schedule_type': ...
                                                     job id
      O eyJqb2JfdG10bGUiOiJCYXJpc3RhIiwiY29tcGFueV9uYW...
      1 eyJqb2JfdGl0bGUi0iJCYXJpc3RhIiwiY29tcGFueV9uYW...
      2 eyJqb2JfdGl0bGUi0iJCYXJpc3RhIiwiY29tcGFueV9uYW...
      3 eyJqb2JfdGl0bGUi0iJFeHBlcmllbmNlZCBCYXJpc3RhIE...
      4 eyJqb2JfdG10bGUiOiJCYXJpc3RhIiwiY29tcGFueV9uYW...
[10]: df.info()
     <class 'pandas.core.frame.DataFrame'>
     RangeIndex: 10 entries, 0 to 9
     Data columns (total 9 columns):
                                Non-Null Count Dtype
      #
          Column
          _____
          title
      0
                                10 non-null
                                                object
      1
          company_name
                                                object
                                10 non-null
      2
          location
                                10 non-null
                                                object
      3
          via
                                10 non-null
                                                object
          description
                                10 non-null
                                                object
      5
          thumbnail
                                9 non-null
                                                object
      6
          extensions
                                10 non-null
                                                object
      7
          detected_extensions 10 non-null
                                                object
          job_id
                                10 non-null
                                                object
     dtypes: object(9)
     memory usage: 848.0+ bytes
     Execute a call to Google Jobs Listing API
 [7]: params2 = {
          "engine": "google_jobs_listing",
          "q": job_id,
          "hl": "en",
          "api_key": api_key
      }
```

```
[33]: search2 = GoogleSearch(params2)
      results2 = search2.get_dict()
```

## View full query results

```
[35]: results2
[35]: {'search_metadata': {'id': '60f8a579f21801579e2caf1c',
        'status': 'Success',
        'json_endpoint':
      'https://serpapi.com/searches/f9035bc4531665bd/60f8a579f21801579e2caf1c.json',
        'created_at': '2021-07-21 22:53:45 UTC',
        'processed_at': '2021-07-21 22:53:45 UTC',
        'google_jobs_listing_url': 'https://www.google.com/search?q=Barista&ibp=htl;jo
     bs#htidocid=6MxRDPBOsGj6D317AAAAA==',
        'raw html file':
      'https://serpapi.com/searches/f9035bc4531665bd/60f8a579f21801579e2caf1c.html',
        'total_time_taken': 2.72},
       'search_parameters': {'q': 'eyJqb2JfdGl0bGUi0iJCYXJpc3RhIiwiY29tcGFueV9uYW11Ijo
     iQmx1ZSBCb3R0bGUgQ29mZmVlIiwiY29tcGFueV9taWQi0iIvbS8wM3AxMnFkIiwiYWRkcmVzc19jaXR
     51joiIiwiYWRkcmVzc19zdGF0ZSI6Ik5ldyBZb3JrIiwiaHRpZG9jaWQi0iI2TXhSRFBCMHNHajZEMzE
     3QUFBQUFBPT0iLCJobC16ImVuIiwiZmMiOiJFdmNCQ3JjQ1FVNVZYMDV4VkhSSV1VaExaREV6UkRoVE5
     HTkljbEpLV1daVVpFeEJXVnBGV1VwUVpXZElTemxCUjJZMFpsZE9WVXRoVjBWa1kwdzFaMGxGTXpsc01
     IbDRiSGxwWjJwb1FsZDJXbWRJWkc5T1drbHNMVlp3YkVaVmVsOW9ZemxLWDJOTFZsWmFNMmhWVUVaU1Z
     uRXpabEZRZVVkcE9WbDNRMVJ2YkZGYVkwOHRUakkyVlVGTVdXVmFhM2RRYjNacGRFWndUWE5MWHpKblU
     xUlnvvmxXvlRaeVpGWm5UMWh0ZEdOYvV6bFhZekZSTTNOWVJsWTBFaGQzV2pNMFdWQl1RMEpsUTNjMVR
     tOVFjM1pYYWpaQmN4b21RVT10V1ZKM1FWZG1WV3hqWVc5a04xRk1aa2wzYjNOUFdUUnpOMFJHYTNRMVp
     3IiwiZmN2IjoiMyIsImZjX2lkIjoiZmNfNjEiLCJhcHBseV9saW5rIjp7InRpdGxlIjoiQXBwbHkgb24
     gTGlua2VkSW4iLCJsaW5rIjoiaHR0cHM6Ly93d3cubGlua2VkaW4uY29tL2pvYnMvdmlldy9iYXJpc3R
     hLWFOLWJsdWUtYm90dGx1LWNvZmZ1ZSOyNjUzNDQ1MzY5P3V0bV9jYW1wYWlnbj1nb29nbGVfam9ic19
     uaWMifXO=',
        'engine': 'google_jobs_listing'},
       'salaries': [],
       'ratings': [{'link': 'https://www.indeed.com/cmp/Blue-Bottle-Coffee-Company/rev
     iews?utm_campaign=google_jobs_reviews&utm_source=google_jobs_reviews&utm_medium=
     organic',
         'source': 'Indeed',
        'rating': 3.4,
        'reviews': 50},
       {'link': 'https://www.glassdoor.com/Reviews/Blue-Bottle-Coffee-Reviews-E803867
      .htm?utm_campaign=google_jobs_reviews&utm_source=google_jobs_reviews&utm_medium=
     organic',
         'source': 'Glassdoor',
         'rating': 3.8,
        'reviews': 191},
       {'link': 'https://www.comparably.com/companies/blue-bottle-coffee?utm_campaign
     =google_jobs_reviews&utm_source=google_jobs_reviews&utm_medium=organic',
```

```
'source': 'Comparably',
   'rating': 2.8,
   'reviews': 237}],
   'apply_options': [{'title': 'Apply on LinkedIn',
     'link': 'https://www.linkedin.com/jobs/view/barista-at-blue-bottle-coffee-265
3445369?utm_campaign=google_jobs_apply&utm_source=google_jobs_apply&utm_medium=organic'}]}
```

# Isolate 'apply\_options' from query results

```
[36]: results2['apply_options']
[36]: [{'title': 'Apply on LinkedIn',
```

'link': 'https://www.linkedin.com/jobs/view/barista-at-blue-bottle-coffee-2653 445369?utm\_campaign=google\_jobs\_apply&utm\_source=google\_jobs\_apply&utm\_medium=organic'}]