

# wikipedia-api

September 7, 2022

## 1 Wikipedia API Example

For questions, contact Dr. Hickman (jh2343@georgetown.edu)

For more see: <https://wikipedia.readthedocs.io/en/latest/code.html>

### Installation

From the command line

```
conda deactivate
conda active ANLY501
conda install -c conda-forge wikipedia
python -m pip install wikipedia_sections
```

To generate the wordcloud you need

```
conda install -c conda-forge wordcloud
```

To use a conda enviroment inside VSC run, if you haven't already

```
conda install ipykernel --update-deps --force-reinstall
```

### Import

```
[ ]: import wikipedia
```

#### 1.0.1 Search

**command:** wikipedia.search(query, results=10, suggestion=False) \* Does a Wikipedia search for query. \* results - the maximum number of results returned \* suggestion - if True, return results and suggestion (if any) in a tuple

**returns:** list of titles of wikipedia page titles relevant to search

```
[ ]: wikipedia.search("soccor", results=10, suggestion=False)
```

```
[ ]: ['Association football',
      'Maria Soccor',
      'Darrin Henson',
      'Brisbane City FC',
      'Palm Beach SC',
      'Taringa Rovers SFC',
```

```
'Mt Gravatt Hawks FC',
'Soccor Velho',
"United States women's national soccer team",
'Robert Clivillés']
```

### 1.0.2 Summary

**command:** `wikipedia.summary(query, sentences=0, chars=0, auto_suggest=True, redirect=True)`  
\* *arguments:* \* `sentences` - if set, return the first sentences sentences (can be no greater than 10).  
\* `chars` - if set, return only the first chars characters (actual text returned may be slightly longer).  
\* `auto_suggest` - let Wikipedia find a valid page title for the query \* `redirect` - allow redirection without raising `RedirectError`

**Returns:** Plain text summary of the page.

```
[ ]: wikipedia.summary("Palm Beach SC")
# this gets information from the page https://en.wikipedia.org/wiki/
↳Palm_Beach_SC
```

```
[ ]: 'Palm Beach Soccer Club is an Australian amateur soccer club based in Gold
Coast, Queensland. The club was formed in 1966.\n\n'
```

### 1.0.3 Page

**command:** `wikipedia.page(title=None, pageid=None, auto_suggest=True, redirect=True, preload=False)` \* *Arguments:* \* `title` - the title of the page to load \* `pageid` - the numeric pageid of the page to load \* `auto_suggest` - let Wikipedia find a valid page title for the query \* `redirect` - allow redirection without raising `RedirectError` \* `preload` - load content, summary, images, references, and links during initialization

**Returns:** a `WikipediaPage` object for the page with title or the pageid (mutually exclusive).

See the link above for more info on objects of the class “`wikipedia.WikipediaPage`”

```
[ ]: page=wikipedia.page(title='Palm Beach SC')
# this gets information from the page https://en.wikipedia.org/wiki/
↳Palm_Beach_SC
```

### 1.0.4 Geosearch

Do a wikipedia geo search for latitude and longitude using HTTP API described in <http://www.mediawiki.org/wiki/Extension:GeoData>

- Arguments:
- `latitude` (float or `decimal.Decimal`)
- `longitude` (float or `decimal.Decimal`)
- Keyword arguments:
- `title` - The title of an article to search for
- `results` - the maximum number of results returned
- `radius` - Search radius in meters. The value must be between 10 and 10000

```
[ ]: #DC = (Latitude, longitude) = (38.89511, -77.03637)
wikipedia.geosearch(38.89511, -77.03637)
```

```
[ ]: ['Zero Milestone',
      'National Christmas Tree (United States)',
      'White House vegetable garden',
      'President's Park',
      'White House tennis court',
      'The Ellipse',
      'South Lawn',
      '1974 White House helicopter incident',
      'General William Tecumseh Sherman Monument',
      'Office of Trade and Manufacturing Policy']
```

### 1.0.5 Explore the WikipediaPage object

```
[ ]: #Plain text content of the page, excluding images, tables, and other data.
page.content
```

```
[ ]: "Palm Beach Soccer Club is an Australian amateur soccer club based in Gold
Coast, Queensland. The club was formed in 1966.\n\n\n== History ==\n\n\n=== Palm
Beach ===\nIn 1964 Eddie Wardell organised a group of boys, one of which was his
son, to play football out of Palm Beach and compete in a three team football
competition against Kingscliff and Twin Towns. The first game for Palm Beach was
held at Salk Oval and the team members wore plain green T-shirts but the team
would later move to a council paddock also located in Palm Beach. By 1965 the
local Gold Coast Association football competition wanted a presence in Palm
Beach and invited the team to join the local junior competitions. The first
official playing strip was debuted in 1965 which was a plain T-shirt that
embossed with a single blue stripe.\nIn 1966 the team incorporated three teams;
under 8s, under 10s and under 12s. During sign on time it was decided the team
needed to unofficially become a club and held its inaugural meeting in the
Currumbin RSL. Neville Cripps, a father of a Palm Beach player, was elected the
first president and names for the club began being thrown around. Names such as
Palm Beach Hotspurs and Palm Beach Pilchards were put forward at the meeting but
Palm Beach Currumbin Soccer Club was voted the winner. In 1966 the club began
wearing playing strip which was a white shirt emblazoned with a large blue
vee.\n1971 saw the council reclaim the playing field of the club and urgent
calls to council were made which led to a field behind the Tugun Bowls Club
becoming their new home ground. With the team being located in Tugun their
official name was changed to the Palm Beach Currumbin Tugun Soccer Club. The
following year while John Neumann was developing the suburb of Palm Beach he
suggested to the club that they should attempt to be given two recreational
fields in Mallawa Drive, Palm Beach. Club president Mal Sutherland met with the
council which would eventually lead to the club being given two fields at their
present location on Mallawa Drive. The Palm Beach Currumbin Lions Football Club
donated the blue and white striped strip that the club would begin wearing.\nThe
```

Gold Coast Association decided in 1975 to begin a senior football competition and the following year Palm Beach would enter their first senior team. By 1977 the building of a clubhouse began as well as the instalment of the floodlights which allowed the club to hold night training sessions. In 1979 a club meeting was held which resulted in the decision for the club to become the first soccer club on the Gold Coast to register as a limited company. 1979 also saw Palm Beach enter an under 16s team in the Brisbane South competition in an attempt to attract higher quality players to begin playing on the Gold Coast and more specifically at Palm Beach. 1983 saw the additional of more floodlights which allowed the club to host night matches as well as the club introducing the shark as the emblem and officially become the Palm Beach Sharks.

In June 1992 the club was granted a full licence by the Licensing Commission which allowed the Sharks to apply and be given permission to install pokies, granting them an additional revenue source. Thirty year anniversary celebrations took place for the Sharks in 1997 at the Currumbin RSL, the venue in which the club held their first meeting 31 years earlier. In 2000 the Sharks were invited to compete in the Brisbane-based State League. The Sharks would prove their worth in 2005 by capturing the minor premiership, the premier cup as well as finishing runner up in the championship. In 2008 the club would withdraw senior teams from all Brisbane competition due to a lack of funds. In October 2012 it was announced that Football Federation Australia granted the Palm Beach Sharks a five-year licence into the newly formed National Premier Leagues Queensland along with teams from Brisbane, Moreton Bay, Rockhampton, Sunshine Coast and Townsville.

Joining Queensland NPL

From 2016 Palm Beach teams competing in the National Premier Leagues Competitions are called Gold Coast City FC, to represent all the Gold Coast community.

Competition timeline

Honours

Football Queensland

National Premier Leagues Queensland

Premiership

Winners (1): 2014

Championship

Winners (1): 2014

Football Queensland Metro and South Coast

NFQPL 3 - Metro / Brisbane Premier League (1st tier Brisbane)

Premiership

Winners (1): 2005

NFQPL 3 - South Coast / Gold Coast Premier League (1st tier Gold Coast)

Premiership

Winners (6): 1988, 1992, 1993, 1994, 1997, 2010

Championship

Winners (7): 1984, 1985, 1993, 1994, 1997, 1998, 2005

President's Cup

Winners (4): 1985, 1988, 1997, 1998

Brisbane Premier Cup (Brisbane domestic cup)

Winners (1): 2005

BLK Cup / FA Cup (Gold Coast domestic cup)

Winners (4): 1993, 1997, 2008, 2012

References

External links

Official website"

```
[ ]: # Get full page HTML.
      pages_content=page.html()

      # Print HTML
      print(type(pages_content))
      # show first 1000 characters
      print(pages_content[0:1000])
```

```
<class 'str'>
```

```
<div class="mw-parser-output"><style data-mw-
deduplicate="TemplateStyles:r1097763485">.mw-parser-output .ambox{border:1px
solid #a2a9b1;border-left:10px solid #36c;background-color:#fbfbfb;box-
sizing:border-box}.mw-parser-output .ambox+link+.ambox,.mw-parser-output
.ambox+link+style+.ambox,.mw-parser-output .ambox+link+link+.ambox,.mw-parser-
output .ambox+.mw-empty-elt+link+.ambox,.mw-parser-output .ambox+.mw-empty-
elt+link+style+.ambox,.mw-parser-output .ambox+.mw-empty-
elt+link+link+.ambox{margin-top:-1px}html body.mediawiki .mw-parser-output
.ambox.mbox-small-left{margin:4px 1em 4px 0;overflow:hidden;width:238px;border-
collapse:collapse;font-size:88%;line-height:1.25em}.mw-parser-output .ambox-
speedy{border-left:10px solid #b32424;background-color:#fee7e6}.mw-parser-output
.ambox-delete{border-left:10px solid #b32424}.mw-parser-output .ambox-
content{border-left:10px solid #f28500}.mw-parser-output .ambox-style{border-
left:10px solid #fc3}.mw-parser-output .ambox-move{border-left:10p
```

```
[ ]: #List of categories of a page.
page.categories
```

```
[ ]: ['1966 establishments in Australia',
'All Wikipedia articles written in Australian English',
'All articles lacking in-text citations',
'Articles lacking in-text citations from December 2020',
'Articles with short description',
'Association football clubs established in 1966',
'Brisbane Premier League teams',
'National Premier Leagues clubs',
'Short description matches Wikidata',
'Soccer teams on the Gold Coast, Queensland',
'Use Australian English from June 2020',
'Use dmy dates from June 2018']
```

```
[ ]: # List of URLs of images on the page.
page.images
```

```
[ ]: ['https://upload.wikimedia.org/wikipedia/commons/8/88/Flag_of_Australia_%28conve
rted%29.svg',
'https://upload.wikimedia.org/wikipedia/commons/0/04/Flag_of_Queensland.svg',
'https://upload.wikimedia.org/wikipedia/commons/8/83/Kit_body.svg',
'https://upload.wikimedia.org/wikipedia/commons/7/7f/Kit_left_arm.svg',
'https://upload.wikimedia.org/wikipedia/commons/c/cd/Kit_right_arm.svg',
'https://upload.wikimedia.org/wikipedia/commons/a/af/Kit_shorts.svg',
'https://upload.wikimedia.org/wikipedia/commons/9/9b/Kit_socks_long.svg',
'https://upload.wikimedia.org/wikipedia/commons/a/a4/Text_document_with_red_que
stion_mark.svg',
'https://upload.wikimedia.org/wikipedia/en/8/8d/Palm_Beach_SC.jpg']
```

```
[ ]: #List of titles of Wikipedia page links on a page.  
page.links
```

```
[ ]: ['1884 Anglo-Queensland FA Cup',  
      '1991 in Queensland soccer',  
      '1992 in Queensland Soccer',  
      '1993 in Queensland Soccer',  
      '1994 in Queensland Soccer',  
      '1995 in Queensland Soccer',  
      '1996 in Queensland Soccer',  
      '1997 in Queensland Soccer',  
      '1998 in Queensland Soccer',  
      '1999 in Queensland Soccer',  
      '2000 in Queensland Soccer',  
      '2001 in Queensland Soccer',  
      '2002 in Queensland Soccer',  
      '2003 Football Queensland South Coast Season',  
      '2003 in Queensland Soccer',  
      '2004 Football Queensland South Coast Season',  
      '2004 in Queensland Soccer',  
      '2005 Football Queensland South Coast Season',  
      '2005 in Queensland Soccer',  
      '2006 Football Queensland South Coast Season',  
      '2006 in Queensland Soccer',  
      '2007 Football Queensland South Coast Season',  
      '2007 in Queensland Soccer',  
      '2008 Football Queensland South Coast Season',  
      '2008 in Queensland Soccer',  
      '2009 Football Queensland South Coast Season',  
      '2009 in Queensland Soccer',  
      '2010 Football Queensland South Coast Season',  
      '2010 in Queensland Soccer',  
      '2011 Football Queensland South Coast Season',  
      '2011 in Queensland Soccer',  
      '2012 Football Queensland South Coast Season',  
      '2012 in Queensland Soccer',  
      '2013 Football Queensland South Coast Season',  
      '2013 Football Queensland season',  
      '2013 in Queensland soccer',  
      '2014 Football Queensland South Coast Season',  
      '2014 Football Queensland season',  
      '2014 in Queensland soccer',  
      '2015 Football Queensland South Coast Season',  
      '2015 Football Queensland season',  
      '2015 in Queensland soccer',  
      '2016 Football Queensland South Coast Season',  
      '2016 Football Queensland season',
```

'2016 in Queensland soccer',  
 '2017 Football Queensland South Coast Season',  
 '2017 Football Queensland season',  
 '2017 in Queensland soccer',  
 '2018 Football Queensland South Coast Season',  
 '2018 Football Queensland season',  
 '2018 in Queensland soccer',  
 '2019 Football Queensland South Coast Season',  
 '2019 Football Queensland season',  
 '2019 in Queensland soccer',  
 '2020 Football Queensland South Coast Season',  
 '2020 Football Queensland season',  
 '2021 Football Queensland South Coast Season',  
 '2021 Football Queensland season',  
 '2021-22 A-League Men',  
 '2022 Football Queensland South Coast Season',  
 '2022 Football Queensland season',  
 '2022 in Queensland men's soccer',  
 '2022 in Queensland soccer',  
 'A-League Men',  
 'A-League Women',  
 'AC Carina FC',  
 'Acacia Ridge FC',  
 'Albany Creek Excelsior FC',  
 'Annerley FC',  
 'Australia',  
 'Australia Cup',  
 'Australia Cup (1962-1968)',  
 'Australia Paralympic soccer team',  
 'Australia national beach soccer team',  
 'Australia national futsal team',  
 'Australia national soccer B team',  
 'Australia national soccer team',  
 'Australia national under-17 soccer team',  
 'Australia national under-20 soccer team',  
 'Australia national under-23 soccer team',  
 'Australia women's national futsal team',  
 'Australia women's national soccer team',  
 'Australia women's national under-17 soccer team',  
 'Australia women's national under-20 soccer team',  
 'Australia women's national under-23 soccer team',  
 'Australian Football League',  
 'Australian rules football',  
 'Australian soccer clubs in international competitions',  
 'Australian soccer league system',  
 'Away colours',  
 'Bardon Latrobe FC',

'Bayside United FC',  
'Bethania Rams FC',  
'Bond University',  
'Bribie Island FC',  
'Brighton Bulldogs FC',  
'Brisbane City FC',  
'Brisbane Knights FC',  
'Brisbane Premier League',  
'Brisbane Roar FC',  
'Brisbane Roar FC Youth',  
'Brisbane Strikers FC',  
'Brisbane Women's Premier League',  
'Broadbeach United S.C.',  
'Bundaberg Spirit FC',  
'Burleigh Heads S.C.',  
'Caboolture Sports FC',  
'Cairns FC',  
'Canale Cup',  
'Capalaba FC',  
'Capital League 1',  
'Capital League 2',  
'Capital League 3',  
'Capricorn Cougars FC',  
'Centenary Stormers FC',  
'Central Queensland FC',  
'Clairvaux FC',  
'Coomera Colts S.C.',  
'Coomera Colts SC',  
'Currumbin RSL',  
'Deception Bay FC',  
'Dick Johnson Racing',  
'Eastern Suburbs FC',  
'FFA Cup',  
'FFA State Institute Challenge',  
'Football Australia',  
'Football Far North & Gulf',  
'Football Federation Australia',  
'Football Queensland',  
'Football Queensland Central',  
'Football Queensland Darling Downs',  
'Football Queensland Metro',  
'Football Queensland North',  
'Football Queensland Premier League',  
'Football Queensland Premier League 2',  
'Football Queensland Premier League 3 - South Coast',  
'Football Queensland Premier League 4',  
'Football Queensland Premier League 4 - South Coast',



'Football Queensland South Coast',  
 'Football Queensland Women's Premier League 3",  
 'Football Sunshine Coast',  
 'Football Whitsunday Coast',  
 'Football Wide Bay',  
 'Gold Coast, Queensland',  
 'Gold Coast Knights F.C.',  
 'Gold Coast Knights SC',  
 'Gold Coast Soccer',  
 'Gold Coast Stars F.C.',  
 'Gold Coast Suns',  
 'Gold Coast Titans',  
 'Gold Coast United F.C.',  
 'Grange Thistle SC',  
 'Griffith University',  
 'History of soccer in Brisbane, Queensland',  
 'Holland Park Hawks FC',  
 'Ipswich City FC',  
 'Ipswich Knights FC',  
 'Jimboomba United FC',  
 'Kangaroo Point Rovers FC',  
 'Kingscliff Wolves F.C.',  
 'Kit (association football)',  
 'List of Australian soccer champions',  
 'List of record home attendances of Australian soccer clubs',  
 'List of soccer clubs in Australia',  
 'List of soccer clubs in Australia by competitive honours won',  
 'List of soccer players in Australia by number of league appearances',  
 'List of soccer players in Australia by number of league goals',  
 'List of soccer stadiums in Australia',  
 'Logan Lightning FC',  
 'Logan Metro FC',  
 'Logan United FC',  
 'Logan Village FC',  
 'Mackay & Whitsundays Magpies Crusaders United',  
 'Magic United F.C.',  
 'Matt Stone Racing',  
 'Merrimac F.C.',  
 'Mitchelton FC',  
 'Moggill FC',  
 'Mooroondu FC',  
 'Moreton Bay United FC',  
 'Motorsport',  
 'Mt Gravatt Hawks FC',  
 'Mudgeeraba S.C.',  
 'Murwillumbah SC',  
 'Musgrave Mustangs F.C.',

'NSL Cup',  
'Narangba Eagles FC',  
'National Premier Leagues',  
'National Premier Leagues Capital Football',  
'National Premier Leagues NSW',  
'National Premier Leagues NSW Women's',  
'National Premier Leagues Northern NSW',  
'National Premier Leagues Queensland',  
'National Premier Leagues South Australia',  
'National Premier Leagues Tasmania',  
'National Premier Leagues Victoria',  
'National Premier Leagues Victoria Women',  
'National Premier Leagues WA Women',  
'National Premier Leagues Western Australia',  
'National Premier Leagues Women's',  
'National Rugby League',  
'National Second Division',  
'Nerang Eagles S.C.',  
'New Farm United FC',  
'Newmarket SFC',  
'North Brisbane FC',  
'North Pine United SC',  
'North Star FC',  
'Northern Fury FC',  
'Old Bridge FC',  
'Olympic FC',  
'Oxley United FC',  
'Palm Beach Currumbin Australian Football Club',  
'Park Ridge FC',  
'Peninsula Power FC',  
'Pine Hills FC',  
'Pine Rivers Athletic FC',  
'Pokies',  
'Professional Footballers Australia',  
'QAS NTC',  
'Queensland',  
'Queensland Lions FC',  
'Queensland State League (soccer)',  
'Redcliffe Dolphins FC',  
'Redlands United FC',  
'Ridge Hills FC',  
'Ripley Valley FC',  
'Robina City S.C.',  
'Rosedale Rovers FC',  
'Rugby league',  
'Runaway Bay S.C.',  
'Salk Oval',

'Samford Rangers FC',  
 'Slacks Creek FC',  
 'Soccer in Australia',  
 'Soccer in Queensland',  
 'Soccer records and statistics in Australia',  
 'Somerset College',  
 'South West Queensland Thunder FC',  
 'Southport Warriors S.C.',  
 'Souths United FC',  
 'Southside Eagles FC',  
 'Sport in Queensland',  
 'Sports on the Gold Coast, Queensland',  
 'Springfield United FC',  
 'St. George Willawong FC',  
 'Sunshine Coast FC',  
 'Sunshine Coast Wanderers FC',  
 'Supercars Championship',  
 'Surfers Paradise Apollo S.C.',  
 'Tallebudgera Valley F.C.',  
 'Taringa Rovers SFC',  
 'Tarragindi Tigers FC',  
 'Teviot Downs SC',  
 'The Gap FC',  
 'The Lakes FC',  
 'The Southport School',  
 'The Star Gold Coast',  
 'Toowong FC',  
 'Tugun Bowls Club',  
 'Tweed United F.C.',  
 'University of Queensland FC',  
 'Virginia United FC (Australia)',  
 'Western Pride FC',  
 'Western Spirit FC',  
 'Westside FC',  
 'Whitsunday Miners FC',  
 'Willowburn FC',  
 'Women's soccer in Australia',  
 'Wynnum District SC',  
 'Yeronga FC']

[ ]: *# List of URLs of external links on a page. May include external links within  
 ↳page that aren't technically cited anywhere.*  
 page.references

[ ]: ['http://www.gccfc.com.au/',  
 'http://www.palmbeachsoccerclub.com.au/',  
 'http://www.socceraust.co.uk/2014/QLD/QLD.html']

```
[ ]: # List of section titles from the table of contents on the page.
page.sections
```

```
[ ]: ['History',
      'Palm Beach',
      'Joining Queensland NPL',
      'Competition timeline',
      'Honours',
      'Football Queensland',
      'Football Queensland Metro and South Coast',
      'References',
      'External links']
```

```
[ ]: # Plain text summary of the page.
page.summary
```

```
[ ]: 'Palm Beach Soccer Club is an Australian amateur soccer club based in Gold
Coast, Queensland. The club was formed in 1966.\n\n'
```

## 1.1 Word cloud example

Search over composite topics

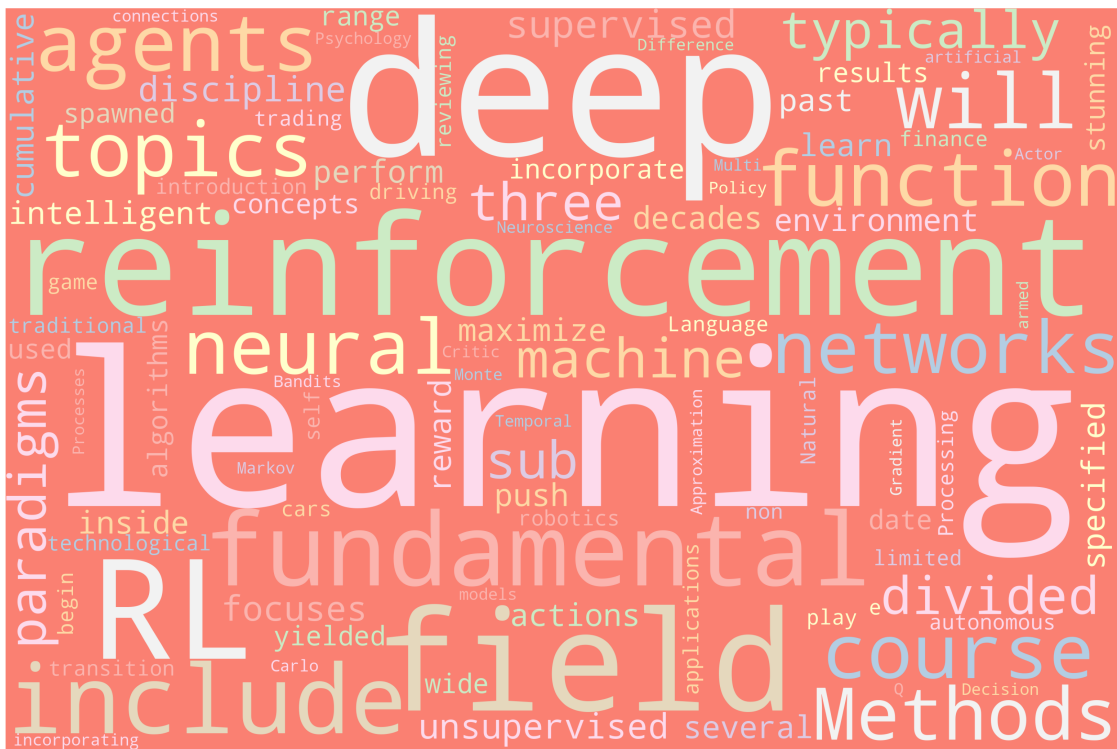
```
[ ]: # MODIFIED FROM
# https://towardsdatascience.com/simple-wordcloud-in-python-2ae54a9f58e5
def generate_word_cloud(my_text):
    from wordcloud import WordCloud, STOPWORDS
    import matplotlib.pyplot as plt
    # exit()
    # Import package
    # Define a function to plot word cloud
    def plot_cloud(wordcloud):
        # Set figure size
        plt.figure(figsize=(40, 30))
        # Display image
        plt.imshow(wordcloud)
        # No axis details
        plt.axis("off");

    # Generate word cloud
    wordcloud = WordCloud(
        width = 3000,
        height = 2000,
        random_state=1,
        background_color='salmon',
        colormap='Pastell1',
        collocations=False,
```

```
stopwords = STOPWORDS.generate(my_text)
plot_cloud(wordcloud)
plt.show()
```

```
text='The field of machine learning is typically divided into three fundamental
↳sub-paradigms. These include supervised learning, unsupervised learning, and
↳reinforcement learning (RL). The discipline of reinforcement learning
↳focuses on how intelligent agents learn to perform actions, inside a
↳specified environment, to maximize a cumulative reward function. Over the
↳past several decades, there has been a push to incorporate concepts from the
↳field of deep-learning into the agents used in RL algorithms. This has
↳spawned the field of Deep reinforcement learning. To date, the field of deep
↳RL has yielded stunning results in a wide range of technological
↳applications. These include, but are not limited to, self-driving cars,
↳autonomous game play, robotics, trading and finance, and Natural Language
↳Processing. This course will begin with an introduction to the fundamentals
↳of traditional, i.e. non-deep, reinforcement learning. After reviewing
↳fundamental deep learning topics the course will transition to deep RL by
↳incorporating artificial neural networks into the models. Topics include
↳Markov Decision Processes, Multi-armed Bandits, Monte Carlo Methods,
↳Temporal Difference Learning, Function Approximation, Deep Neural Networks,
↳Actor-Critic, Deep Q-Learning, Policy Gradient Methods, and connections to
↳Psychology and to Neuroscience.'
```

```
generate_word_cloud(text)
```



## 1.2 Wikipedia text-mining example

The following script does the following \* Loops over a list of countries and topics \* Searches wikipedia for pages associated with those topics \* Scrapes the plaintext content from those pages \* Builds a word cloud with the text for each country

```
[ ]: #-----
#FUNCTION TO PRINT BASIC ABOUT WIKI PAGE
#-----
def print_info(wiki_page):
    print("-----")
    print(wiki_page.title)
    print(wiki_page.url)
    print(wiki_page.sections)

    if(verbose):
        print(wiki_page.sections)
        print(wiki_page.categories)
        print(wiki_page.html)
        print(wiki_page.images)
        print(wiki_page.content)
        print(wikipedia.summary(wiki_page.title, auto_suggest=False))
        print(wiki_page.references)
        print(wiki_page.links[0],len(page.links))

#-----
# LOOP OVER COUNTRY AND TOPIC
#-----
country_list=['usa','france']

for country in country_list:

    print("-----",country,"-----")
    #initialize blank string to store page content
    text=''

    #-----
    # USER INPUTS
    #-----
    topic_list=['travel', 'tourism' ]
    for topic in topic_list:
        topic=topic+' in '+country
        print("topic = ",topic)
        max_num_pages=2                                #max num pages returned by wiki_

↪search
```

```

        verbose=False

        #-----
        #SEARCH FOR RELEVANT PAGES
        #-----
        titles=wikipedia.search(topic,results=max_num_pages)
        print("TITLES=",titles)

        #-----
        #LOOP OVER TITLES
        #-----
        num_files=0
        for title in titles:
            try:
                page = wikipedia.page(title, auto_suggest=False)
                print_info(page)
                text = text + page.content
                num_files+=1
            except:
                print("SOMETHING WENT WRONG:", title);

        generate_word_cloud(text)

```

```

----- usa -----
topic =  travel in usa
TITLES= ['Work and Travel USA', 'Travel agency']
-----

Work and Travel USA
https://en.wikipedia.org/wiki/Work_and_Travel_USA
['Requirements', 'Program overview', 'Work', 'Travel', 'Agencies', 'Legal
aspects', 'Books', 'See also', 'References']
-----

Travel agency
https://en.wikipedia.org/wiki/Travel_agency
['Business model', 'Travel technology', 'Types of agencies', 'Licensing',
'History', 'Outlook', 'See also', 'References', 'External links']
topic =  tourism in usa
TITLES= ['Tourism in the United States', 'Tourism']
-----

Tourism in the United States
https://en.wikipedia.org/wiki/Tourism_in_the_United_States
['19th century', 'Early tourism', 'Late 20th century', '21st century',
'Attractions', 'Travel warning', 'Visitor statistics', 'See also', 'Notes',
'References', 'External links']
-----

Tourism
https://en.wikipedia.org/wiki/Tourism

```





['History', 'Exploitation', 'Freight transport', 'Passenger transport', 'Short and middle distance', 'Long distance', 'Network', 'Rail links to adjacent countries', 'Current status', 'Subsidies', 'Material', 'See also', 'References', 'External links']

topic = tourism in france

TITLES= ['Tourism in France', 'Tourism']

-----  
Tourism in France

[https://en.wikipedia.org/wiki/Tourism\\_in\\_France](https://en.wikipedia.org/wiki/Tourism_in_France)

['Statistics', 'Number of stays', 'Countries issuing tourism in France', 'Nordic countries', 'Touristic regions', 'Paris', 'French Riviera', 'Provence', 'Loire Valley', 'French Alps', 'Corsica', 'Notable places', 'Cities', 'Villages', 'Specific destinations', 'Religious sites', 'Theme parks', 'Most popular tourist attractions', 'Gallery', 'See also', 'References', 'Further reading', 'External links']

-----  
Tourism

<https://en.wikipedia.org/wiki/Tourism>

['Etymology', 'Definitions', 'Tourism products', 'International tourism', 'Basis', 'History', 'Antiquity', 'Middle Ages', 'Grand Tour', 'Emergence of leisure travel', 'Significance of tourism', 'Tourism, cultural heritage and UNESCO', 'Cruise shipping', 'Modern day tourism', 'Mass tourism', 'Niche tourism', 'Winter tourism', 'Recent developments', 'Sustainable tourism', 'Ecotourism', 'Volunteer tourism', 'Pro-poor tourism', 'Recession tourism', 'Medical tourism', 'Educational tourism', 'Event tourism', 'Creative tourism', 'Experiential tourism', 'Dark tourism', 'Social tourism', 'Doom tourism', 'Religious tourism', 'DNA tourism', 'Impacts', 'Growth', 'Space tourism', 'Sports tourism', 'Tourism security', 'Trends since 2000', 'Impacts of the COVID-19 pandemic', 'See also', 'References', 'Bibliography', 'Further reading', 'External links']

