

- WordCloud Visualization of Wikipedia Topics

✓ What is Word Cloud?

WordCloud is a data visualization technique used for representing text data in which the size of each word indicates its frequency or importance. Significant textual data points can be highlighted using a word cloud. Word Clouds are widely used for analyzing data from social network websites.

```
# --- WordCloud Visualization from Wikipedia ---

from wordcloud import WordCloud, STOPWORDS
import wikipedia
import matplotlib.pyplot as plt

# --- Step 1: Define Stopwords ---
stop_words = set(STOPWORDS)

# --- Step 2: Search Wikipedia Safely ---
search_topic = "Artificial intelligence" # Change this to any topic
try:
    info = wikipedia.summary(search_topic)
    print(f"Showing preview for '{search_topic}':\n")
    print(info[:500], "...")

    # --- Step 3: Generate WordCloud ---
    word_cloud = WordCloud(width=800, height=400,
                            background_color='white',
                            stopwords=stop_words,
                            colormap='plasma').generate(info)

    # --- Step 4: Display WordCloud ---
    plt.figure(figsize=(12, 6))
    plt.imshow(word_cloud, interpolation='bilinear')
    plt.axis("off")
    plt.title(f"WordCloud of '{search_topic}'", fontsize=16)
    plt.show()

except wikipedia.exceptions.DisambiguationError as e:
    print(f"Error: '{search_topic}' is ambiguous. Please be more specific.\nPossible options include:\n{e.options}")
except wikipedia.exceptions.PageError:
    print(f"Error: Wikipedia page for '{search_topic}' not found. Please try a different search term.")
```

Showing preview for 'Artificial intelligence':

Artificial intelligence (AI) is the capability of computational systems to perform tasks typically associated with human intelligence. High-profile applications of AI include ...



