











5 Useful Python Libraries You Didn't **Know Existed**













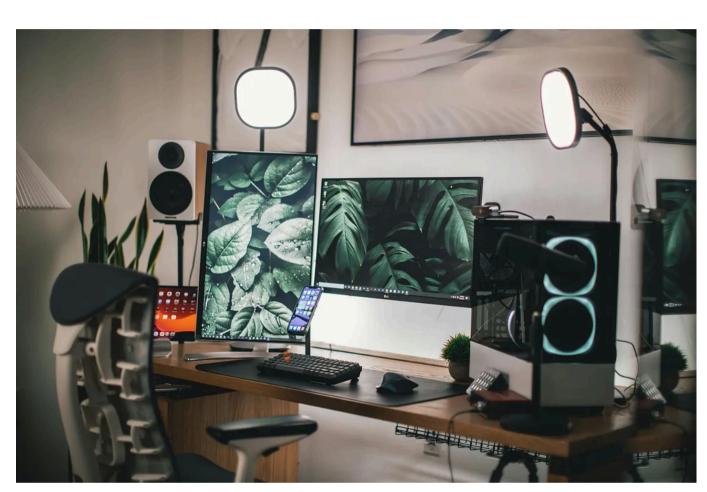


Photo by Roberto Nickson: Link to Image

Today, I wanted to share with you 5 useful Python libraries you didn't know existed. This is not meant to be a thorough tutorial of each library but to briefly introduce you to each one. Without further ado, let's begin!

5) humanize

Link to PyPI page: Click Here

Humanize is a library that turns a number into a readable human form. According to its official PyPI page, humanize can humanize integers, date/time, precise time deltas, file size, floating point numbers, and scientific notation. To install, run the following command:

pip install humanize

Now, let's look at an example of each:

```
import humanize # Importing humanize
import datetime as dt # Importing datetime

# Turning a integer into an easier-to-read form
print(f"Integer: {humanize.intword(123455913)}")

# Humanizing a date using datetime
print(f"Datetime: {humanize.naturaldate(dt.date(2007, 6, 5))}")

# Humanizing precise time deltas
delta = dt.timedelta(seconds=3633, days=2, microseconds=123000)
print(f"Delta: {humanize.precisedelta(delta)}")

# Turning a file size into a readable form
print(f"File Size: {humanize.naturalsize(100000000)}")

# Humanizing floating point numbers
print(f"Floats: {humanize.fractional(0.3)}")

# Returning scientific notation
print(f"Scientific Notation: {humanize.scientific(20000)}")
```

The code above returns the following results:

```
Integer: 123.5 million
Datetime: Jun 05 2007
Delta: 2 days, 1 hour and 33.12 seconds
File Size: 10.0 MB
Floats: 3/10
Scientific Notation: 2.00 x 10<sup>4</sup>
```

4) pyforest

```
Link to PyPI page: Click Here
```

Are you a data analyst/scientist that's tired of importing pandas, matplotlib, numpy, etc.? Using Pyforest, you can import all the most popular data tools simultaneously. Run the following command to get started:

```
pip install pyforest
```

Now all you have to do is run the following command at the top of your Python file:

```
import pyforest
lazy_imports()
```

You can also see all the libraries Pyforest imports by using:

```
print(pyforest.lazy_imports())
```

3) psutil

```
Link to PyPI page: Click Here
```

Want to get your system information easily? psutil easily fetches your system information including CPU, RAM, battery, network statistics, and storage data as well as static information such as OS, Python version, etc. To install, run this command:

```
pip install psutil
```

Now, let's look at a few examples:

```
import psutil
import humanize

# Get used RAM information
ram = humanize.naturalsize(psutil.virtual_memory().used)

# Get network data
network = psutil.net_io_counters()
sent_mb = humanize.naturalsize(network.bytes_sent)
received_mb = humanize.naturalsize(network.bytes_recv)

# Get CPU count
cpu_number = psutil.cpu_count()

# Print results with labels
print(f"Used RAM: {ram}")
print(f"Network Sent: {sent_mb}")
print(f"Network Received: {received_mb}")
print(f"CPU Count: {cpu_number}")
```

We get the following results:

```
Used RAM: 12.3 GB
Network Sent: 53.6 MB
Network Received: 582.6 MB
CPU Count: 8
```

2) streamlit

Link to PyPI page: Click Here

Streamlit lets users build dashboards, generate reports, or create chat apps within minutes. Streamlit provides built-in graph functions, text tools, and machine learning tools as well as third-party tools such as Plotly and Folium.

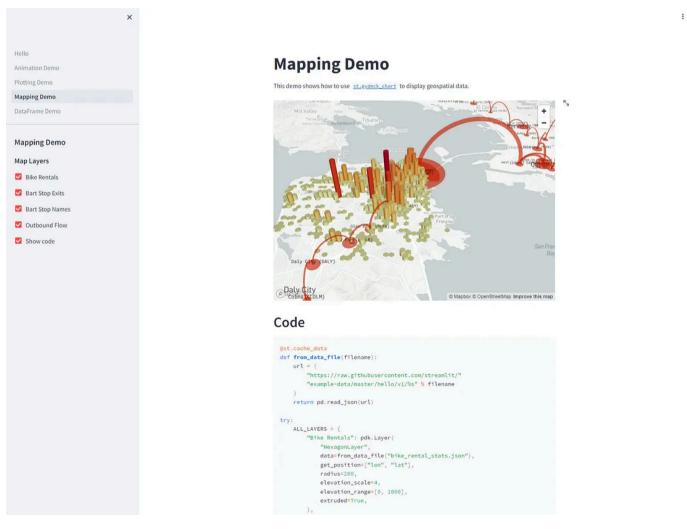
Since this is not an easy library to show in summary, here is an example page created with streamlit. To install, run:

```
pip install streamlit
```

To run a built-in page, run the following command in your shell/command prompt:

```
streamlit hello
```

You will see a page opened in your web browser like this:



Streamlit Example

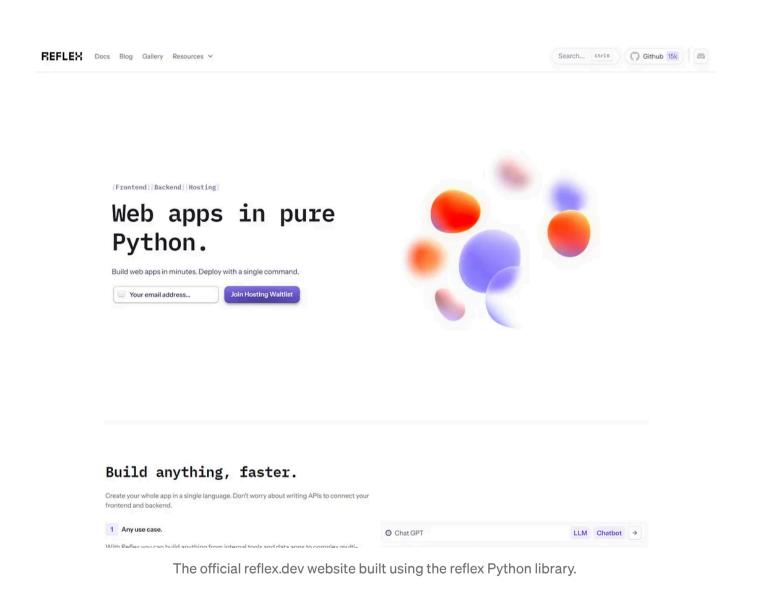
1) reflex

As an alternative to Flask, Reflex is quickly becoming one of the go-to web GUI libraries in Python. It offers just about anything you'll ever need to build a web application, including a full-fledged backend and responsive front end. Your site can be hosted on their public cloud or privately such as AWS and MS Azure.

Once again, since the scope of this library is so large, I will show an example webpage only. To install, run:

pip install reflex		

An example page created with Reflex is their official website, which you can visit <u>here</u>.



Thank you all for reading! I hope you learned something new and useful!

