

# ■ Awesome Python

A curated list of awesome Python frameworks, libraries and software

*Generated automatically from README.md*

# Awesome Python **!Awesome**(<https://github.com/sindresorhus/awesome>)

An opinionated list of awesome Python frameworks, libraries, software and resources.

- Awesome Python** - ([#awesome-python](#))
- Admin Panels** - ([#admin-panels](#))
- Algorithms and Design Patterns** - ([#algorithms-and-design-patterns](#))
- ASGI Servers** - ([#asgi-servers](#))
- Asynchronous Programming** - ([#asynchronous-programming](#))
- Audio** - ([#audio](#))
- Authentication** - ([#authentication](#))
- Build Tools** - ([#build-tools](#))
- Built-in Classes Enhancement** - ([#built-in-classes-enhancement](#))
- Caching** - ([#caching](#))
- ChatOps Tools** - ([#chatops-tools](#))
- CMS** - ([#cms](#))
- Code Analysis** - ([#code-analysis](#))
- Command-line Interface Development** - ([#command-line-interface-development](#))
- Command-line Tools** - ([#command-line-tools](#))
- Computer Vision** - ([#computer-vision](#))
- Configuration Files** - ([#configuration-files](#))
- Cryptography** - ([#cryptography](#))
- Data Analysis** - ([#data-analysis](#))
- Data Validation** - ([#data-validation](#))
- Data Visualization** - ([#data-visualization](#))
- Database Drivers** - ([#database-drivers](#))
- Database** - ([#database](#))
- Date and Time** - ([#date-and-time](#))
- Debugging Tools** - ([#debugging-tools](#))
- Deep Learning** - ([#deep-learning](#))
- DevOps Tools** - ([#devops-tools](#))
- Distributed Computing** - ([#distributed-computing](#))
- Distribution** - ([#distribution](#))
- Documentation** - ([#documentation](#))
- Downloader** - ([#downloader](#))
- Editor Plugins and IDEs** - ([#editor-plugins-and-ides](#))
- Email** - ([#email](#))
- Environment Management** - ([#environment-management](#))
- File Manipulation** - ([#file-manipulation](#))
- Functional Programming** - ([#functional-programming](#))
- Game Development** - ([#game-development](#))
- Geolocation** - ([#geolocation](#))

**GUI Development** - ([#gui-development](#))  
**Hardware** - ([#hardware](#))  
**HTML Manipulation** - ([#html-manipulation](#))  
**HTTP Clients** - ([#http-clients](#))  
**Image Processing** - ([#image-processing](#))  
**Implementations** - ([#implementations](#))  
**Interactive Interpreter** - ([#interactive-interpreter](#))  
**Internationalization** - ([#internationalization](#))  
**Job Scheduler** - ([#job-scheduler](#))  
**Logging** - ([#logging](#))  
**Machine Learning** - ([#machine-learning](#))  
**Miscellaneous** - ([#miscellaneous](#))  
**Natural Language Processing** - ([#natural-language-processing](#))  
**Network Virtualization** - ([#network-virtualization](#))  
**News Feed** - ([#news-feed](#))  
**ORM** - ([#orm](#))  
**Package Management** - ([#package-management](#))  
**Package Repositories** - ([#package-repositories](#))  
**Penetration testing** - ([#penetration-testing](#))  
**Permissions** - ([#permissions](#))  
**Processes** - ([#processes](#))  
**Recommender Systems** - ([#recommender-systems](#))  
**Refactoring** - ([#refactoring](#))  
**RESTful API** - ([#restful-api](#))  
**Robotics** - ([#robotics](#))  
**RPC Servers** - ([#rpc-servers](#))  
**Science** - ([#science](#))  
**Search** - ([#search](#))  
**Serialization** - ([#serialization](#))  
**Serverless Frameworks** - ([#serverless-frameworks](#))  
**Shell** - ([#shell](#))  
**Specific Formats Processing** - ([#specific-formats-processing](#))  
**Static Site Generator** - ([#static-site-generator](#))  
**Tagging** - ([#tagging](#))  
**Task Queues** - ([#task-queues](#))  
**Template Engine** - ([#template-engine](#))  
**Testing** - ([#testing](#))  
**Text Processing** - ([#text-processing](#))  
**Third-party APIs** - ([#third-party-apis](#))  
**URL Manipulation** - ([#url-manipulation](#))  
**Video** - ([#video](#))

**Web Asset Management** - ([#web-asset-management](#))

**Web Content Extracting** - ([#web-content-extracting](#))

**Web Crawling** - ([#web-crawling](#))

**Web Frameworks** - ([#web-frameworks](#))

**WebSocket** - ([#websocket](#))

**WSGI Servers** - ([#wsgi-servers](#))

**Resources** - ([#resources](#))

**Newsletters** - ([#newsletters](#))

**Podcasts** - ([#podcasts](#))

**Contributing** - ([#contributing](#))

## Admin Panels

\*Libraries for administrative interfaces.\*

**ajenti** - The admin panel your servers deserve. (<https://github.com/ajenti/ajenti>)

**django-grappelli** - A jazzy skin for the Django Admin-Interface.  
(<https://github.com/sehmaschine/django-grappelli>)

**flask-admin** - Simple and extensible administrative interface framework for Flask.  
(<https://github.com/flask-admin/flask-admin>)

**flower** - Real-time monitor and web admin for Celery. (<https://github.com/mher/flower>)

**jet-bridge** - Admin panel framework for any application with nice UI (ex Jet Django).  
(<https://github.com/jet-admin/jet-bridge>)

**streamlit** - A framework which lets you build dashboards, generate reports, or create chat apps in minutes.  
(<https://github.com/streamlit/streamlit>)

**wooeey** - A Django app which creates automatic web UIs for Python scripts. (<https://github.com/wooeey/wooeey>)

## Algorithms and Design Patterns

\*Python implementation of data structures, algorithms and design patterns. Also see **awesome-algorithms**.\*

\* Algorithms

**algorithms** - Minimal examples of data structures and algorithms. (<https://github.com/keon/algorithms>)

**python-ds** - A collection of data structure and algorithms for coding interviews.  
(<https://github.com/prabhupant/python-ds>)

**sortedcontainers** - Fast and pure-Python implementation of sorted collections.  
(<https://github.com/grantjenks/python-sortedcont...>)

**thealgorithms** - All Algorithms implemented in Python. (<https://github.com/TheAlgorithms/Python>)

\* Design Patterns

**pypattyrn** - A simple yet effective library for implementing common design patterns.  
(<https://github.com/tylerlaberge/PyPattyrn>)

**python-patterns** - A collection of design patterns in Python. (<https://github.com/faif/python-patterns>)

**transitions** - A lightweight, object-oriented finite state machine implementation.  
(<https://github.com/pytransitions/transitions>)

## ASGI Servers

\*ASGI-compatible web servers.\*

**daphne** - A HTTP, HTTP2 and WebSocket protocol server for ASGI and ASGI-HTTP.  
(<https://github.com/django/daphne>)

**hypercorn** - An ASGI and WSGI Server based on Hyper libraries and inspired by Gunicorn.  
(<https://github.com/pgjones/hypercorn>)

**uvicorn** - A lightning-fast ASGI server implementation, using uvloop and httptools.  
(<https://github.com/encode/uvicorn>)

## Asynchronous Programming

\*Libraries for asynchronous, concurrent and parallel execution. Also see **awesome-asyncio**.\*

**asyncio** - (Python standard library) Asynchronous I/O, event loop, coroutines and tasks.  
(<https://docs.python.org/3/library/asyncio.html>)

**awesome-asyncio** - (<https://github.com/timofurrer/awesome-asyncio>)

**concurrent.futures** - (Python standard library) A high-level interface for asynchronously executing callables.  
(<https://docs.python.org/3/library/concurrent.fu...>)

**eventlet** - Asynchronous framework with WSGI support. (<https://github.com/eventlet/eventlet>)

**gevent** - A coroutine-based Python networking library that uses [greenlet](<https://github.com/python-greenlet/greenlet>). (<https://github.com/gevent/gevent>)

**multiprocessing** - (Python standard library) Process-based parallelism.  
(<https://docs.python.org/3/library/multiprocessi...>)

**trio** - A friendly library for async concurrency and I/O. (<https://github.com/python-trio/trio>)

**twisted** - An event-driven networking engine. (<https://github.com/twisted/twisted>)

**uvloop** - Ultra fast asyncio event loop. (<https://github.com/MagicStack/uvloop>)

## Audio

\*Libraries for manipulating audio and its metadata.\*

\* Audio

**audioFlux** - A library for audio and music analysis, feature extraction. (<https://github.com/libAudioFlux/audioFlux>)

**audioread** - Cross-library (GStreamer + Core Audio + MAD + FFmpeg) audio decoding.  
(<https://github.com/beetbox/audioread>)

**dejavu** - Audio fingerprinting and recognition. (<https://github.com/worldveil/dejavu>)

**kapre** - Keras Audio Preprocessors. (<https://github.com/keunwoochoi/kapre>)

**librosa** - Python library for audio and music analysis. (<https://github.com/librosa/librosa>)

**matchering** - A library for automated reference audio mastering. (<https://github.com/sergree/matchering>)

**mingus** - An advanced music theory and notation package with MIDI file and playback support.  
(<http://bspaans.github.io/python-mingus/>)

**pyaudioanalysis** - Audio feature extraction, classification, segmentation and applications.  
(<https://github.com/tyiannak/pyAudioAnalysis>)

**pydub** - Manipulate audio with a simple and easy high level interface. (<https://github.com/jiaaro/pydub>)

**timeside** - Open web audio processing framework. (<https://github.com/Parisson/TimeSide>)

\* Metadata

**beets** - A music library manager and [MusicBrainz](<https://musicbrainz.org/>) tagger.  
(<https://github.com/beetbox/beets>)

**eyed3** - A tool for working with audio files, specifically MP3 files containing ID3 metadata.  
(<https://github.com/nicfit/eyeD3>)

**mutagen** - A Python module to handle audio metadata. (<https://github.com/quodlibet/mutagen>)

**tinytag** - A library for reading music meta data of MP3, OGG, FLAC and Wave files.  
(<https://github.com/devsnd/tinytag>)

## Authentication

\*Libraries for implementing authentications schemes.\*

\* OAuth

**authlib** - JavaScript Object Signing and Encryption draft implementation. (<https://github.com/lepture/authlib>)

**django-allauth** - Authentication app for Django that "just works." (<https://github.com/pennersr/django-allauth>)

**django-oauth-toolkit** - OAuth 2 goodies for Django. (<https://github.com/jazzband/django-oauth-toolkit>)

**oauthlib** - A generic and thorough implementation of the OAuth request-signing logic.  
(<https://github.com/oauthlib/oauthlib>)

\* JWT

**pyjwt** - JSON Web Token implementation in Python. (<https://github.com/jpadilla/pyjwt>)

**python-jose** - A JOSE implementation in Python. (<https://github.com/mpdavis/python-jose/>)

## Build Tools

\*Compile software from source code.\*

**bitbake** - A make-like build tool for embedded Linux. (<https://github.com/openembedded/bitbake>)

**buildout** - A build system for creating, assembling and deploying applications from multiple parts.  
(<https://github.com/buildout/buildout>)

**platformio** - A console tool to build code with different development platforms.  
(<https://github.com/platformio/platformio-core>)

**pybuilder** - A continuous build tool written in pure Python. (<https://github.com/pybuilder/pybuilder>)

**scons** - A software construction tool. (<https://github.com/SCons/scons>)

## Built-in Classes Enhancement

\*Libraries for enhancing Python built-in classes.\*

**attrs** - Replacement for `__init__`, `__eq__`, `__repr__`, etc. boilerplate in class definitions.  
(<https://github.com/python-attrs/attrs>)

**bidict** - Efficient, Pythonic bidirectional map data structures and related functionality..  
(<https://github.com/jab/bidict>)

**box** - Python dictionaries with advanced dot notation access. (<https://github.com/cdgriffith/Box>)

**dataclasses** - (Python standard library) Data classes. ([https://docs.python.org/3/library/dataclasses.h...](https://docs.python.org/3/library/dataclasses.html))

**dotteddict** - A library that provides a method of accessing lists and dicts with a dotted path notation.  
(<https://github.com/carlosescr/DottedDict>)

## CMS

\*Content Management Systems.\*

**feincms** - One of the most advanced Content Management Systems built on Django.  
(<https://github.com/feincms/feincms>)

**indico** - A feature-rich event management system, made @ [CERN](<https://en.wikipedia.org/wiki/CERN>).  
(<https://github.com/indico/indico>)

**wagtail** - A Django content management system. (<https://github.com/wagtail/wagtail>)

## Caching

\*Libraries for caching data.\*

**beaker** - A WSGI middleware for sessions and caching. (<https://github.com/bbangert/beaker>)

**django-cache-machine** - Automatic caching and invalidation for Django models.  
(<https://github.com/django-cache-machine/django-...>)

**django-cacheops** - A slick ORM cache with automatic granular event-driven invalidation.  
(<https://github.com/Suor/django-cacheops>)

**dogpile.cache** - dogpile.cache is a next generation replacement for Beaker made by the same authors.  
(<https://github.com/sqlalchemy/dogpile.cache>)

**hermescache** - Python caching library with tag-based invalidation and dogpile effect prevention.  
(<https://pypi.org/project/HermesCache/>)

**pylibmc** - A Python wrapper around the [libmemcached](<https://libmemcached.org/libMemcached.html>) interface.  
(<https://github.com/lericson/pylibmc>)

**python-diskcache** - SQLite and file backed cache backend with faster lookups than memcached and redis.  
(<https://github.com/grantjenks/python-diskcache>)

## ChatOps Tools

\*Libraries for chatbot development.\*

**errbot** - The easiest and most popular chatbot to implement ChatOps. (<https://github.com/errbotio/errbot/>)

## Code Analysis

\*Tools of static analysis, linters and code quality checkers. Also see **awesome-static-analysis**.\*

\* Code Analysis

**code2flow** - Turn your Python and JavaScript code into DOT flowcharts.  
(<https://github.com/scottrogowski/code2flow>)

**prospector** - A tool to analyse Python code. (<https://github.com/PyCQA/prospector>)

**vulture** - A tool for finding and analysing dead Python code. (<https://github.com/jendrikseipp/vulture>)

\* Code Linters

**flake8** - A wrapper around `pycodestyle`, `pyflakes` and McCabe. (<https://github.com/PyCQA/flake8>)

**awesome-flake8-extensions** - (<https://github.com/DmytroLitvinov/awesome-flake8-extensions>)

**pylint** - A fully customizable source code analyzer. (<https://github.com/pylint-dev/pylint>)

#### \* Code Formatters

**black** - The uncompromising Python code formatter. (<https://github.com/psf/black>)

**isort** - A Python utility / library to sort imports. (<https://github.com/timothycrosley/isort>)

**yapf** - Yet another Python code formatter from Google. (<https://github.com/google/yapf>)

#### \* Static Type Checkers, also see **awesome-python-typing**

**mypy** - Check variable types during compile time. (<https://github.com/python/mypy>)

**pyre-check** - Performant type checking. (<https://github.com/facebook/pyre-check>)

**typeshed** - Collection of library stubs for Python, with static types. (<https://github.com/python/typeshed>)

#### \* Static Type Annotations Generators

**monkeytype** - A system for Python that generates static type annotations by collecting runtime types. (<https://github.com/Instagram/MonkeyType>)

**pytype** - Pytype checks and infers types for Python code - without requiring type annotations. (<https://github.com/google/pytype>)

## Command-line Interface Development

#### \* Libraries for building command-line applications.\*

#### \* Command-line Application Development

**cement** - CLI Application Framework for Python. (<https://github.com/datafolklabs/cement>)

**click** - A package for creating beautiful command line interfaces in a composable way. (<https://github.com/pallets/click>)

**cliff** - A framework for creating command-line programs with multi-level commands. (<https://github.com/openstack/cliff>)

**python-fire** - A library for creating command line interfaces from absolutely any Python object. (<https://github.com/google/python-fire>)

**python-prompt-toolkit** - A library for building powerful interactive command lines. (<https://github.com/prompt-toolkit/python-prompt-toolkit>)

#### \* Terminal Rendering

**alive-progress** - A new kind of Progress Bar, with real-time throughput, eta and very cool animations. (<https://github.com/rsalmei/alive-progress>)

**asciimatics** - A package to create full-screen text UIs (from interactive forms to ASCII animations). (<https://github.com/peterbrittain/asciimatics>)

**bashplotlib** - Making basic plots in the terminal. (<https://github.com/glamp/bashplotlib>)

**colorama** - Cross-platform colored terminal text. (<https://github.com/tartley/colorama>)

**rich** - Python library for rich text and beautiful formatting in the terminal. Also provides a great `RichHandler` log handler. (<https://github.com/Textualize/rich>)

**tqdm** - Fast, extensible progress bar for loops and CLI. (<https://github.com/tqdm/tqdm>)

## Command-line Tools



\*Useful CLI-based tools for productivity.\*

#### \* Productivity Tools

**cookiecutter** - A command-line utility that creates projects from cookiecutters (project templates).  
(<https://github.com/cookiecutter/cookiecutter>)

**copier** - A library and command-line utility for rendering projects templates. (<https://github.com/copier-org/copier>)

**doitlive** - A tool for live presentations in the terminal. (<https://github.com/sloria/doitlive>)

**howdoi** - Instant coding answers via the command line. (<https://github.com/gleitz/howdoi>)

**invoke** - A tool for managing shell-oriented subprocesses and organizing executable Python code into CLI-invokable tasks. (<https://github.com/pyinvoke/invoke>)

**pathpicker** - Select files out of bash output. (<https://github.com/facebook/PathPicker>)

**thefuck** - Correcting your previous console command. (<https://github.com/nvbn/thefuck>)

**tmuxp** - A [tmux](<https://github.com/tmux/tmux>) session manager. (<https://github.com/tmux-python/tmuxp>)

**try** - A dead simple CLI to try out python packages - it's never been easier. (<https://github.com/timofurrer/try>)

#### \* CLI Enhancements

**httpie** - A command line HTTP client, a user-friendly cURL replacement. (<https://github.com/httpie/cli>)

**iredis** - Redis CLI with autocompletion and syntax highlighting. (<https://github.com/laixintao/iredis>)

**litecli** - SQLite CLI with autocompletion and syntax highlighting. (<https://github.com/dbcli/litecli>)

**mycli** - MySQL CLI with autocompletion and syntax highlighting. (<https://github.com/dbcli/mycli>)

**pgcli** - PostgreSQL CLI with autocompletion and syntax highlighting. (<https://github.com/dbcli/pgcli>)

## Computer Vision

#### \*Libraries for Computer Vision.\*

**easyocr** - Ready-to-use OCR with 40+ languages supported. (<https://github.com/JaidedAI/EasyOCR>)

**kornia** - Open Source Differentiable Computer Vision Library for PyTorch. (<https://github.com/kornia/kornia/>)

**opencv** - Open Source Computer Vision Library. (<https://opencv.org/>)

**pytesseract** - A wrapper for [Google Tesseract OCR](<https://github.com/tesseract-ocr>).  
(<https://github.com/madmaze/pytesseract>)

**tesseractocr** - Another simple, Pillow-friendly, wrapper around the `tesseract-ocr` API for OCR.  
(<https://github.com/sirfz/tesseractocr>)

## Configuration Files

#### \*Libraries for storing and parsing configuration options.\*

**configobj** - INI file parser with validation. (<https://github.com/DiffSK/configobj>)

**configparser** - (Python standard library) INI file parser. (<https://docs.python.org/3/library/configparser...>)

**hydra** - Hydra is a framework for elegantly configuring complex applications.  
(<https://github.com/facebookresearch/hydra>)

**python-decouple** - Strict separation of settings from code. (<https://github.com/HBNetwork/python-decouple>)

## Cryptography

**cryptography** - A package designed to expose cryptographic primitives and recipes to Python developers. (<https://github.com/pyca/cryptography>)

**paramiko** - The leading native Python SSHv2 protocol library. (<https://github.com/paramiko/paramiko>)

**pynacl** - Python binding to the Networking and Cryptography (NaCl) library. (<https://github.com/pyca/pynacl>)

## Data Analysis

\*Libraries for data analyzing.\*

**aws-sdk-pandas** - Pandas on AWS. (<https://github.com/aws/aws-sdk-pandas>)

**datasette** - An open source multi-tool for exploring and publishing data. (<https://github.com/simonw/datasette>)

**optimus** - Agile Data Science Workflows made easy with PySpark. (<https://github.com/hi-primus/optimus>)

**pandas** - A library providing high-performance, easy-to-use data structures and data analysis tools. (<http://pandas.pydata.org/>)

## Data Validation

\*Libraries for validating data. Used for forms in many cases.\*

**cerberus** - A lightweight and extensible data validation library. (<https://github.com/pyeve/cerberus>)

**colander** - Validating and deserializing data obtained via XML, JSON, an HTML form post. (<https://github.com/Pylons/colander>)

**jsonschema** - An implementation of [JSON Schema](<http://json-schema.org/>) for Python. (<https://github.com/python-jsonschema/jsonschema>)

**pydantic** - Data validation using Python type hints. (<https://github.com/pydantic/pydantic>)

**schema** - A library for validating Python data structures. (<https://github.com/keleshev/schema>)

**schematics** - Data Structure Validation. (<https://github.com/schematics/schematics>)

**voluptuous** - A Python data validation library. (<https://github.com/alecthomas/voluptuous>)

## Data Visualization

\*Libraries for visualizing data. Also see **awesome-javascript**.\*

**altair** - Declarative statistical visualization library for Python. (<https://github.com/altair-viz/altair>)

**bokeh** - Interactive Web Plotting for Python. (<https://github.com/bokeh/bokeh>)

**bqplot** - Interactive Plotting Library for the Jupyter Notebook. (<https://github.com/bloomberg/bqplot>)

**cartopy** - A cartographic python library with matplotlib support. (<https://github.com/SciTools/cartopy>)

**diagrams** - Diagram as Code. (<https://github.com/mingrammer/diagrams>)

**matplotlib** - A Python 2D plotting library. (<https://github.com/matplotlib/matplotlib>)

**plotnine** - A grammar of graphics for Python based on ggplot2. (<https://github.com/has2k1/plotnine>)

**pygal** - A Python SVG Charts Creator. (<https://github.com/Kozea/pygal>)

**pygraphviz** - Python interface to [Graphviz](<http://www.graphviz.org/>). (<https://github.com/pygraphviz/pygraphviz>)

**pyqtgraph** - Interactive and realtime 2D/3D/Image plotting and science/engineering widgets. (<https://github.com/pyqtgraph/pyqtgraph>)

**seaborn** - Statistical data visualization using Matplotlib. (<https://github.com/mwaskom/seaborn>)

**vispy** - High-performance scientific visualization based on OpenGL. (<https://github.com/vispy/vispy>)

## Database

\*Databases implemented in Python.\*

**pickleDB** - A simple and lightweight key-value store for Python. (<https://github.com/patx/pickledb>)

**tinydb** - A tiny, document-oriented database. (<https://github.com/msiemens/tinydb>)

**zodb** - A native object database for Python. A key-value and object graph database. (<https://github.com/zopefoundation/ZODB>)

## Database Drivers

\*Libraries for connecting and operating databases.\*

\* MySQL - **awesome-mysql**

**mysqlclient** - MySQL connector with Python 3 support

([mysql-python](<https://sourceforge.net/projects/mysql-python/>) fork). (<https://github.com/PyMySQL/mysqlclient>)

**pymysql** - A pure Python MySQL driver compatible to mysql-python. (<https://github.com/PyMySQL/PyMySQL>)

\* PostgreSQL - **awesome-postgres**

**psycopg** - The most popular PostgreSQL adapter for Python. (<https://github.com/psycopg/psycopg>)

\* SQLite - **awesome-sqlite**

**sqlite-utils** - Python CLI utility and library for manipulating SQLite databases.

(<https://github.com/simonw/sqlite-utils>)

**sqlite3** - (Python standard library) SQLite interface compliant with DB-API 2.0.

(<https://docs.python.org/3/library/sqlite3.html>)

\* Other Relational Databases

**clickhouse-driver** - Python driver with native interface for ClickHouse.

(<https://github.com/mymarilyn/clickhouse-driver>)

**pymssql** - A simple database interface to Microsoft SQL Server. (<https://github.com/pymssql/pymssql>)

\* NoSQL Databases

**cassandra-driver** - The Python Driver for Apache Cassandra. (<https://github.com/datastax/python-driver>)

**happybase** - A developer-friendly library for Apache HBase. (<https://github.com/python-happybase/happybase>)

**kafka-python** - The Python client for Apache Kafka. (<https://github.com/dpkp/kafka-python>)

**motor** - The async Python driver for MongoDB. (<https://github.com/mongodb/motor>)

**pymongo** - The official Python client for MongoDB. (<https://github.com/mongodb/mongo-python-driver>)

**redis-py** - The Python client for Redis. (<https://github.com/redis/redis-py>)

## Date and Time

\*Libraries for working with dates and times.\*

**arrow** - A Python library that offers a sensible and human-friendly approach to creating, manipulating, formatting and converting dates, times and timestamps. (<https://github.com/arrow-py/arrow>)

**dateutil** - Extensions to the standard Python [datetime](https://docs.python.org/3/library/datetime.html) module. (https://github.com/dateutil/dateutil)

**pendulum** - Python datetimes made easy. (https://github.com/sdispater/pendulum)

**pytz** - World timezone definitions, modern and historical. Brings the [tz database](https://en.wikipedia.org/wiki/Tz\_database) into Python. (https://pypi.org/project/pytz/)

## Debugging Tools

\*Libraries for debugging code.\*

\* pdb-like Debugger

**ipdb** - IPython-enabled [pdb](https://docs.python.org/3/library/pdb.html). (https://github.com/gotcha/ipdb)

**pudb** - A full-screen, console-based Python debugger. (https://github.com/inducer/pudb)

\* Tracing

**manhole** - Debugging UNIX socket connections and present the stacktraces for all threads and an interactive prompt. (https://github.com/ionelmc/python-manhole)

**python-hunter** - A flexible code tracing toolkit. (https://github.com/ionelmc/python-hunter)

\* Profiler

**py-spy** - A sampling profiler for Python programs. Written in Rust. (https://github.com/benfred/py-spy)

**vprof** - Visual Python profiler. (https://github.com/nvdr/vprof)

\* Others

**django-debug-toolbar** - Display various debug information for Django. (https://github.com/jazzband/django-debug-toolbar)

**flask-debugtoolbar** - A port of the django-debug-toolbar to flask. (https://github.com/pallets-eco/flask-debugtoolbar)

**icecream** - Inspect variables, expressions, and program execution with a single, simple function call. (https://github.com/gruns/icecream)

**pyelftools** - Parsing and analyzing ELF files and DWARF debugging information. (https://github.com/eliben/pyelftools)

## Deep Learning

\*Frameworks for Neural Networks and Deep Learning. Also see **awesome-deep-learning**.\*

**keras** - A high-level neural networks library and capable of running on top of either TensorFlow or Theano. (https://github.com/keras-team/keras)

**pytorch-lightning** - Deep learning framework to train, deploy, and ship AI products Lightning fast. (https://github.com/Lightning-AI/pytorch-lightning)

**pytorch** - Tensors and Dynamic neural networks in Python with strong GPU acceleration. (https://github.com/pytorch/pytorch)

**stable-baselines3** - PyTorch implementations of Stable Baselines (deep) reinforcement learning algorithms. (https://github.com/DLR-RM/stable-baselines3)

**tensorflow** - The most popular Deep Learning framework created by Google. (https://github.com/tensorflow/tensorflow)

**theano** - A library for fast numerical computation. (https://github.com/Theano/Theano)

## DevOps Tools

\*Software and libraries for DevOps.\*

\* Configuration Management

**ansible** - A radically simple IT automation platform. (<https://github.com/ansible/ansible>)

**cloudinit** - A multi-distribution package that handles early initialization of a cloud instance. (<https://github.com/canonical/cloud-init>)

**openstack** - Open source software for building private and public clouds. (<https://www.openstack.org/>)

**pyinfra** - A versatile CLI tools and python libraries to automate infrastructure. (<https://github.com/pyinfra-dev/pyinfra>)

**saltstack** - Infrastructure automation and management system. (<https://github.com/saltstack/salt>)

\* SSH-style Deployment

**cuisine** - Chef-like functionality for Fabric. (<https://github.com/sebastien/cuisine>)

**fabric** - A simple, Pythonic tool for remote execution and deployment. (<https://github.com/fabric/fabric>)

\* Process Management

**supervisor** - Supervisor process control system for UNIX. (<https://github.com/Supervisor/supervisor>)

\* Monitoring

**psutil** - A cross-platform process and system utilities module. (<https://github.com/giampaolo/psutil>)

\* Backup

**borg** - A deduplicating archiver with compression and encryption. (<https://github.com/borgbackup/borg>)

## Distributed Computing

\*Frameworks and libraries for Distributed Computing.\*

\* Batch Processing

**dask** - A flexible parallel computing library for analytic computing. (<https://github.com/dask/dask>)

**luigi** - A module that helps you build complex pipelines of batch jobs. (<https://github.com/spotify/luigi>)

**PySpark** - [Apache Spark](<https://spark.apache.org/>) Python API. (<https://github.com/apache/spark>)

**Ray** - A system for parallel and distributed Python that unifies the machine learning ecosystem. (<https://github.com/ray-project/ray/>)

\* Stream Processing

**faust** - A stream processing library, porting the ideas from [Kafka Streams](<https://kafka.apache.org/documentation/streams/>) to Python. (<https://github.com/robinhood/faust>)

**streamparse** - Run Python code against real-time streams of data via [Apache Storm](<http://storm.apache.org/>). (<https://github.com/Parsely/streamparse>)

## Distribution

\*Libraries to create packaged executables for release distribution.\*

**py2app** - Freezes Python scripts (Mac OS X). (<https://github.com/ronaldoussoren/py2app>)

**py2exe** - Freezes Python scripts (Windows). (<https://github.com/py2exe/py2exe>)

**pyarmor** - A tool used to obfuscate python scripts, bind obfuscated scripts to fixed machine or expire obfuscated scripts. (<https://github.com/dashingsoft/pyarmor>)

**pyinstaller** - Converts Python programs into stand-alone executables (cross-platform). (<https://github.com/pyinstaller/pyinstaller>)

**shiv** - A command line utility for building fully self-contained zipapps (PEP 441), but with all their dependencies included. (<https://github.com/linkedin/shiv>)

## Documentation

\*Libraries for generating project documentation.\*

**sphinx** - Python Documentation generator. (<https://github.com/sphinx-doc/sphinx/>)

**awesome-sphinxdoc** - (<https://github.com/yoloseem/awesome-sphinxdoc>)

**pdoc** - Epydoc replacement to auto generate API documentation for Python libraries. (<https://github.com/mitmproxy/pdoc>)

## Downloader

\*Libraries for downloading.\*

**akshare** - A financial data interface library, built for human beings! (<https://github.com/jindaxiang/akshare>)

**s3cmd** - A command line tool for managing Amazon S3 and CloudFront. (<https://github.com/s3tools/s3cmd>)

**youtube-dl** - A command-line program to download videos from YouTube and other video sites. (<https://github.com/yt-dl-org/youtube-dl/>)

## Editor Plugins and IDEs

\* Emacs

**elpy** - Emacs Python Development Environment. (<https://github.com/jorgenschaefel/elpy>)

\* Vim

**jedi-vim** - Vim bindings for the Jedi auto-completion library for Python. (<https://github.com/davidhalter/jedi-vim>)

**python-mode** - An all in one plugin for turning Vim into a Python IDE. (<https://github.com/python-mode/python-mode>)

**YouCompleteMe** - Includes [Jedi](<https://github.com/davidhalter/jedi>)-based completion engine for Python. (<https://github.com/Valloric/YouCompleteMe>)

\* Visual Studio

**PTVS** - Python Tools for Visual Studio. (<https://github.com/Microsoft/PTVS>)

\* Visual Studio Code

**Python** - The official VSCode extension with rich support for Python. (<https://marketplace.visualstudio.com/items?item...>)

\* IDE

**PyCharm** - Commercial Python IDE by JetBrains. Has free community edition available. (<https://www.jetbrains.com/pycharm/>)

**spyder** - Open Source Python IDE. (<https://github.com/spyder-ide/spyder>)

## Email

\*Libraries for sending and parsing email.\*

\* Mail Servers

**modoboa** - A mail hosting and management platform including a modern Web UI.  
(<https://github.com/modoboa/modoboa>)

**salmon** - A Python Mail Server. (<https://github.com/moggers87/salmon>)

\* Clients

**imbox** - Python IMAP for Humans. (<https://github.com/martinrusev/imbox>)

**yagmail** - Yet another Gmail/SMTP client. (<https://github.com/kootenpv/yagmail>)

\* Others

**flanker** - An email address and Mime parsing library. (<https://github.com/mailgun/flanker>)

**mailer** - High-performance extensible mail delivery framework. (<https://github.com/marrow/mailer>)

## Environment Management

\*Libraries for Python version and virtual environment management.\*

**pyenv** - Simple Python version management. (<https://github.com/pyenv/pyenv>)

**virtualenv** - A tool to create isolated Python environments. (<https://github.com/pypa/virtualenv>)

## File Manipulation

\*Libraries for file manipulation.\*

**mimetypes** - (Python standard library) Map filenames to MIME types.  
(<https://docs.python.org/3/library/mimetypes.html>)

**path.py** - A module wrapper for [os.path](<https://docs.python.org/3/library/os.path.html>).  
(<https://github.com/jaraco/path.py>)

**pathlib** - (Python standard library) An cross-platform, object-oriented path library.  
(<https://docs.python.org/3/library/pathlib.html>)

**python-magic** - A Python interface to the libmagic file type identification library.  
(<https://github.com/ahupp/python-magic>)

**watchdog** - API and shell utilities to monitor file system events. (<https://github.com/gorakhargosh/watchdog>)

## Functional Programming

\*Functional Programming with Python.\*

**coconut** - A variant of Python built for simple, elegant, Pythonic functional programming.  
(<https://github.com/evhub/coconut>)

**cytoolz** - Cython implementation of `Toolz`: High performance functional utilities.  
(<https://github.com/pytoolz/cytoolz/>)

**fancy** - A fancy and practical functional tools. (<https://github.com/Suor/fancy>)

**more-itertools** - More routines for operating on iterables, beyond `itertools`.  
(<https://github.com/erikrose/more-itertools>)



**returns** - A set of type-safe monads, transformers, and composition utilities.

(<https://github.com/dry-python/returns>)

**toolz** - A collection of functional utilities for iterators, functions, and dictionaries. (<https://github.com/pytoolz/toolz>)

## GUI Development

\*Libraries for working with graphical user interface applications.\*

**curses** - Built-in wrapper for [ncurses](<http://www.gnu.org/software/ncurses/>) used to create terminal GUI applications. (<https://docs.python.org/3/library/curses.html>)

**DearPyGui** - A Simple GPU accelerated Python GUI framework (<https://github.com/RaylockLLC/DearPyGui/>)

**Eel** - A library for making simple Electron-like offline HTML/JS GUI apps. (<https://github.com/ChrisKnott/Eel>)

**enaml** - Creating beautiful user-interfaces with Declarative Syntax like QML. (<https://github.com/nucleic/enaml>)

**Flexx** - Flexx is a pure Python toolkit for creating GUI's, that uses web technology for its rendering.

(<https://github.com/zooflO/flexx>)

**Gooey** - Turn command line programs into a full GUI application with one line.

(<https://github.com/chriskiehl/Gooey>)

**kivy** - A library for creating NUI applications, running on Windows, Linux, Mac OS X, Android and iOS.

(<https://kivy.org/>)

**pyglet** - A cross-platform windowing and multimedia library for Python. (<https://github.com/pyglet/pyglet>)

**PyGObject** - Python Bindings for GLib/GObject/GIO/GTK+ (GTK+3). (<https://pygobject.readthedocs.io/>)

**PyQt** - Python bindings for the [Qt](<https://www.qt.io/>) cross-platform application and UI framework.

(<https://doc.qt.io/qtforpython/>)

**PySimpleGUI** - Wrapper for tkinter, Qt, WxPython and Remi. (<https://github.com/PySimpleGUI/PySimpleGUI>)

**pywebview** - A lightweight cross-platform native wrapper around a webview component.

(<https://github.com/r0x0r/pywebview/>)

**Tkinter** - Tkinter is Python's de-facto standard GUI package. (<https://wiki.python.org/moin/TkInter>)

**Toga** - A Python native, OS native GUI toolkit. (<https://github.com/pybee/toga>)

**urwid** - A library for creating terminal GUI applications with strong support for widgets, events, rich colors, etc.

(<http://urwid.org/>)

**wxPython** - A blending of the wxWidgets C++ class library with the Python. (<https://wxpython.org/>)

## GraphQL

\*Libraries for working with GraphQL.\*

**graphene** - GraphQL framework for Python. (<https://github.com/graphql-python/graphene/>)

## Game Development

\*Awesome game development libraries.\*

**Arcade** - Arcade is a modern Python framework for crafting games with compelling graphics and sound.

(<https://api.arcade.academy/en/latest/>)

**Cocos2d** - cocos2d is a framework for building 2D games, demos, and other graphical/interactive applications.

(<https://www.cocos.com/en/cocos2d-x>)

**Harfang3D** - Python framework for 3D, VR and game development. (<http://www.harfang3d.com>)



**Panda3D** - 3D game engine developed by Disney. (<https://www.panda3d.org/>)

**Pygame** - Pygame is a set of Python modules designed for writing games. (<http://www.pygame.org/news.html>)

**PyOgre** - Python bindings for the Ogre 3D render engine, can be used for games, simulations, anything 3D. (<http://www.ogre3d.org/tikiwiki/PyOgre>)

**PyOpenGL** - Python ctypes bindings for OpenGL and it's related APIs. (<http://pyopengl.sourceforge.net/>)

**PySDL2** - A ctypes based wrapper for the SDL2 library. (<https://pysdl2.readthedocs.io>)

**RenPy** - A Visual Novel engine. (<https://www.renpy.org/>)

## Geolocation

\*Libraries for geocoding addresses and working with latitudes and longitudes.\*

**django-countries** - A Django app that provides a country field for models and forms. (<https://github.com/SmileyChris/django-countries>)

**geodjango** - A world-class geographic web framework. (<https://docs.djangoproject.com/en/dev/ref/contr...>)

**geojson** - Python bindings and utilities for GeoJSON. (<https://github.com/jazzband/geojson>)

**geopy** - Python Geocoding Toolbox. (<https://github.com/geopy/geopy>)

## HTML Manipulation

\*Libraries for working with HTML and XML.\*

**beautifulsoup** - Providing Pythonic idioms for iterating, searching, and modifying HTML or XML. (<https://www.crummy.com/software/BeautifulSoup/b...>)

**bleach** - A whitelist-based HTML sanitization and text linkification library. (<https://github.com/mozilla/bleach>)

**cssutils** - A CSS library for Python. (<https://pypi.org/project/cssutils/>)

**html5lib** - A standards-compliant library for parsing and serializing HTML documents and fragments. (<https://github.com/html5lib/html5lib-python>)

**lxml** - A very fast, easy-to-use and versatile library for handling HTML and XML. (<http://lxml.de/>)

**markupsafe** - Implements a XML/HTML/XHTML Markup safe string for Python. (<https://github.com/pallets/markupsafe>)

**pyquery** - A jQuery-like library for parsing HTML. (<https://github.com/gawel/pyquery>)

**untangle** - Converts XML documents to Python objects for easy access. (<https://github.com/stchris/untangle>)

**WeasyPrint** - A visual rendering engine for HTML and CSS that can export to PDF. (<http://weasyprint.org>)

**xmldataset** - Simple XML Parsing. (<https://xmldataset.readthedocs.io/en/latest/>)

**xmldict** - Working with XML feel like you are working with JSON. (<https://github.com/martinblech/xmldict>)

## HTTP Clients

\*Libraries for working with HTTP.\*

**httpx** - A next generation HTTP client for Python. (<https://github.com/encode/httpx>)

**requests** - HTTP Requests for Humans. (<https://github.com/psf/requests>)

**treq** - Python requests like API built on top of Twisted's HTTP client. (<https://github.com/twisted/treq>)

**urllib3** - A HTTP library with thread-safe connection pooling, file post support, sanity friendly. (<https://github.com/urllib3/urllib3>)

## Hardware

\*Libraries for programming with hardware.\*

**keyboard** - Hook and simulate global keyboard events on Windows and Linux.

(<https://github.com/boppreh/keyboard>)

**mouse** - Hook and simulate global mouse events on Windows and Linux. (<https://github.com/boppreh/mouse>)

**pynput** - A library to control and monitor input devices. (<https://github.com/moses-palmer/pynput>)

**scapy** - A brilliant packet manipulation library. (<https://github.com/secdev/scapy>)

## Image Processing

\*Libraries for manipulating images.\*

**pillow** - Pillow is the friendly [PIL](<http://www.pythonware.com/products/pil/>) fork.

(<https://github.com/python-pillow/Pillow>)

**pymatting** - A library for alpha matting. (<http://github.com/pymatting/pymatting>)

**python-barcode** - Create barcodes in Python with no extra dependencies.

(<https://github.com/WhyNotHugo/python-barcode>)

**python-qrcode** - A pure Python QR Code generator. (<https://github.com/lincolnloop/python-qrcode>)

**pyvips** - A fast image processing library with low memory needs. (<https://github.com/libvips/pyvips>)

**pywal** - A tool that generates color schemes from images. (<https://github.com/dylanaraps/pywal>)

**quads** - Computer art based on quadtrees. (<https://github.com/fogleman/Quads>)

**scikit-image** - A Python library for (scientific) image processing. (<http://scikit-image.org/>)

**thumbor** - A smart imaging service. It enables on-demand crop, re-sizing and flipping of images.

(<https://github.com/thumbor/thumbor>)

**wand** - Python bindings for [MagickWand](<http://www.imagemagick.org/script/magick-wand.php>), C API for ImageMagick. (<https://github.com/emccconville/wand>)

## Implementations

\*Implementations of Python.\*

**clpython** - Implementation of the Python programming language written in Common Lisp.

(<https://github.com/metawilm/cl-python>)

**cpython** - \*\*Default, most widely used implementation of the Python programming language written in C.\*\*

(<https://github.com/python/cpython>)

**cython** - Optimizing Static Compiler for Python. (<https://github.com/cython/cython>)

**ironpython** - Implementation of the Python programming language written in C#.

(<https://github.com/IronLanguages/ironpython3>)

**micropython** - A lean and efficient Python programming language implementation.

(<https://github.com/micropython/micropython>)

**numba** - Python JIT compiler to LLVM aimed at scientific Python. (<https://github.com/numba/numba>)

**peachpy** - x86-64 assembler embedded in Python. (<https://github.com/Maratyszcza/PeachPy>)

**pypy** - A very fast and compliant implementation of the Python language. (<https://foss.heptapod.net/pypy/pypy>)

**pyston** - A Python implementation using JIT techniques. (<https://github.com/pyston/pyston/>)

## Interactive Interpreter

\*Interactive Python interpreters (REPL).\*

**bpython** - A fancy interface to the Python interpreter. (<https://github.com/bpython/bpython>)

**Jupyter Notebook (IPython)** - A rich toolkit to help you make the most out of using Python interactively. (<https://jupyter.org>)

**awesome-jupyter** - (<https://github.com/markusschanta/awesome-jupyter>)

**ptpython** - Advanced Python REPL built on top of the [python-prompt-toolkit](<https://github.com/jonathanslenders/python-prompt-toolkit>). (<https://github.com/jonathanslenders/ptpython>)

## Internationalization

\*Libraries for working with i18n.\*

**Babel** - An internationalization library for Python. (<http://babel.pocoo.org/en/latest/>)

**PyICU** - A wrapper of International Components for Unicode C++ library ([ICU])(<http://site.icu-project.org/>). (<https://github.com/ovalhub/pyicu>)

## Job Scheduler

\*Libraries for scheduling jobs.\*

**Airflow** - Airflow is a platform to programmatically author, schedule and monitor workflows. (<https://airflow.apache.org/>)

**APScheduler** - A light but powerful in-process task scheduler that lets you schedule functions. (<http://apscheduler.readthedocs.io/en/latest/>)

**django-schedule** - A calendaring app for Django. (<https://github.com/thauber/django-schedule>)

**doit** - A task runner and build tool. (<http://pydoit.org/>)

**gunnery** - Multipurpose task execution tool for distributed systems with web-based interface. (<https://github.com/gunnery/gunnery>)

**Joblib** - A set of tools to provide lightweight pipelining in Python. (<https://joblib.readthedocs.io/>)

**Plan** - Writing crontab file in Python like a charm. (<https://github.com/fengsp/plan>)

**Prefect** - A modern workflow orchestration framework that makes it easy to build, schedule and monitor robust data pipelines. (<https://github.com/PrefectHQ/prefect>)

**schedule** - Python job scheduling for humans. (<https://github.com/dbader/schedule>)

**Spiff** - A powerful workflow engine implemented in pure Python. (<https://github.com/knipknap/SpiffWorkflow>)

**TaskFlow** - A Python library that helps to make task execution easy, consistent and reliable. (<https://docs.openstack.org/developer/taskflow/>)

## Logging

\*Libraries for generating and working with logs.\*

**logbook** - Logging replacement for Python. (<http://logbook.readthedocs.io/en/stable/>)

**logging** - (Python standard library) Logging facility for Python. (<https://docs.python.org/3/library/logging.html>)

**loguru** - Library which aims to bring enjoyable logging in Python. (<https://github.com/Delgan/loguru>)

**sentry-python** - Sentry SDK for Python. (<https://github.com/getsentry/sentry-python>)

**structlog** - Structured logging made easy. (<https://www.structlog.org/en/stable/>)

## Machine Learning

\*Libraries for Machine Learning. Also see **awesome-machine-learning**.\*

**gym** - A toolkit for developing and comparing reinforcement learning algorithms. (<https://github.com/openai/gym>)

**H2O** - Open Source Fast Scalable Machine Learning Platform. (<https://github.com/h2oai/h2o-3>)

**Metrics** - Machine learning evaluation metrics. (<https://github.com/benhamner/Metrics>)

**MindsDB** - MindsDB is an open source AI layer for existing databases that allows you to effortlessly develop, train and deploy state-of-the-art machine learning models using standard queries. (<https://github.com/mindsdb/mindsdb>)

**NuPIC** - Numenta Platform for Intelligent Computing. (<https://github.com/numenta/nupic>)

**scikit-learn** - The most popular Python library for Machine Learning. (<http://scikit-learn.org/>)

**Spark ML** - [Apache Spark](<http://spark.apache.org/>)'s scalable Machine Learning library. (<http://spark.apache.org/docs/latest/ml-guide.html>)

**vowpal\_porpoise** - A lightweight Python wrapper for [Vowpal Wabbit]([https://github.com/JohnLangford/vowpal\\_wabbit/](https://github.com/JohnLangford/vowpal_wabbit/)). ([https://github.com/josephreisinger/vowpal\\_porpoise](https://github.com/josephreisinger/vowpal_porpoise))

**xgboost** - A scalable, portable, and distributed gradient boosting library. (<https://github.com/dmlc/xgboost>)

## Microsoft Windows

\*Python programming on Microsoft Windows.\*

**Python(x,y)** - Scientific-applications-oriented Python Distribution based on Qt and Spyder. (<http://python-xy.github.io/>)

**pythonlibs** - Unofficial Windows binaries for Python extension packages. (<http://www.lfd.uci.edu/~gohlke/pythonlibs/>)

**PythonNet** - Python Integration with the .NET Common Language Runtime (CLR). (<https://github.com/pythonnet/pythonnet>)

**PyWin32** - Python Extensions for Windows. (<https://github.com/mhammond/pywin32>)

**WinPython** - Portable development environment for Windows 7/8. (<https://winpython.github.io/>)

## Miscellaneous

\*Useful libraries or tools that don't fit in the categories above.\*

**blinker** - A fast Python in-process signal/event dispatching system. (<https://github.com/jek/blinker>)

**boltons** - A set of pure-Python utilities. (<https://github.com/mahmoud/boltons>)

**itsdangerous** - Various helpers to pass trusted data to untrusted environments. (<https://github.com/pallets/itsdangerous>)

**magenta** - A tool to generate music and art using artificial intelligence. (<https://github.com/magenta/magenta>)

**pluginbase** - A simple but flexible plugin system for Python. (<https://github.com/mitsuhiko/pluginbase>)

**tryton** - A general purpose business framework. (<http://www.tryton.org/>)

## Natural Language Processing

\*Libraries for working with human languages.\*

- General

**gensim** - Topic Modeling for Humans. (<https://github.com/RaRe-Technologies/gensim>)

**langid.py** - Stand-alone language identification system. (<https://github.com/saffsd/langid.py>)

**nltk** - A leading platform for building Python programs to work with human language data. (<http://www.nltk.org/>)

**pattern** - A web mining module. (<https://github.com/clips/pattern>)

**polyglot** - Natural language pipeline supporting hundreds of languages. (<https://github.com/aboSamoor/polyglot>)

**pytext** - A natural language modeling framework based on PyTorch.

(<https://github.com/facebookresearch/pytext>)

**PyTorch-NLP** - A toolkit enabling rapid deep learning NLP prototyping for research.

(<https://github.com/PetrochukM/PyTorch-NLP>)

**spacy** - A library for industrial-strength natural language processing in Python and Cython. (<https://spacy.io/>)

**Stanza** - The Stanford NLP Group's official Python library, supporting 60+ languages.

(<https://github.com/stanfordnlp/stanza>)

- Chinese

**funNLP** - A collection of tools and datasets for Chinese NLP. (<https://github.com/fighting41love/funNLP>)

**jieba** - The most popular Chinese text segmentation library. (<https://github.com/fxsjy/jieba>)

**pkuseg-python** - A toolkit for Chinese word segmentation in various domains.

(<https://github.com/lancopku/pkuseg-python>)

**snownlp** - A library for processing Chinese text. (<https://github.com/isnowfy/snownlp>)

## Network Virtualization

\*Tools and libraries for Virtual Networking and SDN (Software Defined Networking).\*

**mininet** - A popular network emulator and API written in Python. (<https://github.com/mininet/mininet>)

**napalm** - Cross-vendor API to manipulate network devices. (<https://github.com/napalm-automation/napalm>)

**pox** - A Python-based SDN control applications, such as OpenFlow SDN controllers.

(<https://github.com/noxrepo/pox>)

## News Feed

\*Libraries for building user's activities.\*

**django-activity-stream** - Generating generic activity streams from the actions on your site.

(<https://github.com/justquick/django-activity-st...>)

**Stream Framework** - Building news feed and notification systems using Cassandra and Redis.

(<https://github.com/tschellenbach/Stream-Framework>)

## ORM

\*Libraries that implement Object-Relational Mapping or data mapping techniques.\*

\* Relational Databases

**Django Models** - The Django ORM. (<https://docs.djangoproject.com/en/dev/topics/db...>)

**SQLAlchemy** - The Python SQL Toolkit and Object Relational Mapper. (<https://www.sqlalchemy.org/>)

**awesome-sqlalchemy** - (<https://github.com/dahlia/awesome-sqlalchemy>)

**dataset** - Store Python dicts in a database - works with SQLite, MySQL, and PostgreSQL.  
(<https://github.com/pudo/dataset>)

**orator** - The Orator ORM provides a simple yet beautiful ActiveRecord implementation.  
(<https://github.com/sdispater/orator>)

**orm** - An async ORM. (<https://github.com/encode/orm>)

**peewee** - A small, expressive ORM. (<https://github.com/coleifer/peewee>)

**pony** - ORM that provides a generator-oriented interface to SQL. (<https://github.com/ponyorm/pony/>)

**pydal** - A pure Python Database Abstraction Layer. (<https://github.com/web2py/pydal/>)

#### \* NoSQL Databases

**hot-redis** - Rich Python data types for Redis. (<https://github.com/stephenmcd/hot-redis>)

**mongoengine** - A Python Object-Document-Mapper for working with MongoDB.  
(<https://github.com/MongoEngine/mongoengine>)

**PynamoDB** - A Pythonic interface for [Amazon DynamoDB](<https://aws.amazon.com/dynamodb/>).  
(<https://github.com/pynamodb/PynamoDB>)

**redisco** - A Python Library for Simple Models and Containers Persisted in Redis.  
(<https://github.com/kiddouk/redisco>)

## Package Management

#### \*Libraries for package and dependency management.\*

**pip** - The package installer for Python. (<https://pip.pypa.io/en/stable/>)

**pip-tools** - A set of tools to keep your pinned Python dependencies fresh. (<https://github.com/jazzband/pip-tools>)

**PyPI** - (<https://pypi.org/>)

**conda** - Cross-platform, Python-agnostic binary package manager. (<https://github.com/conda/conda/>)

**poetry** - Python dependency management and packaging made easy. (<https://github.com/sdispater/poetry>)

## Package Repositories

#### \*Local PyPI repository server and proxies.\*

**bandersnatch** - PyPI mirroring tool provided by Python Packaging Authority (PyPA).  
(<https://github.com/pypa/bandersnatch/>)

**devpi** - PyPI server and packaging/testing/release tool. (<https://github.com/devpi/devpi>)

**localshop** - Local PyPI server (custom packages and auto-mirroring of pypi).  
(<https://github.com/jazzband/localshop>)

**warehouse** - Next generation Python Package Repository (PyPI). (<https://github.com/pypa/warehouse>)

## Penetration Testing

#### \*Frameworks and tools for penetration testing.\*

**fsociety** - A Penetration testing framework. (<https://github.com/Manisso/fsociety>)

**setoolkit** - A toolkit for social engineering. (<https://github.com/trustedsec/social-engineer-t...>)

**sqlmap** - Automatic SQL injection and database takeover tool. (<https://github.com/sqlmapproject/sqlmap>)

## Permissions

\*Libraries that allow or deny users access to data or functionality.\*

**django-guardian** - Implementation of per object permissions for Django 1.2+ (<https://github.com/django-guardian/django-guard...>)

**django-rules** - A tiny but powerful app providing object-level permissions to Django, without requiring a database. (<https://github.com/dfunckt/django-rules>)

## Processes

\*Libraries for starting and communicating with OS processes.\*

**delegator.py** - [Subprocesses](<https://docs.python.org/3/library/subprocess.html>) for Humans 2.0. (<https://github.com/amitt001/delegator.py>)

**sarge** - Yet another wrapper for subprocess. (<https://sarge.readthedocs.io/en/latest/>)

**sh** - A full-fledged subprocess replacement for Python. (<https://github.com/amoffat/sh>)

## Recommender Systems

\*Libraries for building recommender systems.\*

**annoy** - Approximate Nearest Neighbors in C++/Python optimized for memory usage. (<https://github.com/spotify/annoy>)

**fastFM** - A library for Factorization Machines. (<https://github.com/ibayer/fastFM>)

**implicit** - A fast Python implementation of collaborative filtering for implicit datasets. (<https://github.com/benfred/implicit>)

**libffm** - A library for Field-aware Factorization Machine (FFM). (<https://github.com/guestwalk/libffm>)

**lightfm** - A Python implementation of a number of popular recommendation algorithms. (<https://github.com/lyst/lightfm>)

**spotlight** - Deep recommender models using PyTorch. (<https://github.com/maciejkula/spotlight>)

**Surprise** - A scikit for building and analyzing recommender systems. (<https://github.com/NicolasHug/Surprise>)

**tensorrec** - A Recommendation Engine Framework in TensorFlow. (<https://github.com/jfkirk/tensorrec>)

## Refactoring

\*Refactoring tools and libraries for Python\*

**Bicycle Repair Man** - Bicycle Repair Man, a refactoring tool for Python. (<http://bicyclerepair.sourceforge.net/>)

**Bowler** - Safe code refactoring for modern Python. (<https://pybowler.io/>)

**Rope** - Rope is a python refactoring library. (<https://github.com/python-rope/rope>)

## RESTful API

\*Libraries for building RESTful APIs.\*



\* Django

**django-rest-framework** - A powerful and flexible toolkit to build web APIs.

(<https://github.com/encode/django-rest-framework>)

**django-tastypie** - Creating delicious APIs for Django apps. (<https://github.com/django-tastypie/django-tasty...>)

\* Flask

**eve** - REST API framework powered by Flask, MongoDB and good intentions. (<https://github.com/pyeve/eve>)

**flask-api** -Browsable Web APIs for Flask. (<https://github.com/flask-api/flask-api>)

**flask-restful** - Quickly building REST APIs for Flask. (<https://github.com/flask-restful/flask-restful>)

\* Pyramid

**cornice** - A RESTful framework for Pyramid. (<https://github.com/Cornices/cornice>)

\* Framework agnostic

**falcon** - A high-performance framework for building cloud APIs and web app backends.

(<https://github.com/falconry/falcon>)

**fastapi** - A modern, fast, web framework for building APIs with Python 3.6+ based on standard Python type hints.

(<https://github.com/tiangolo/fastapi>)

**hug** - A Python 3 framework for cleanly exposing APIs. (<https://github.com/hugapi/hug>)

**sandman2** - Automated REST APIs for existing database-driven systems.

(<https://github.com/jeffknupp/sandman2>)

**sanic** - A Python 3.6+ web server and web framework that's written to go fast.

(<https://github.com/sanic-org/sanic>)

## Robotics

\*Libraries for robotics.\*

**PythonRobotics** - This is a compilation of various robotics algorithms with visualizations.

(<https://github.com/AtsushiSakai/PythonRobotics>)

**rospy** - This is a library for ROS (Robot Operating System). (<http://wiki.ros.org/rospy>)

## RPC Servers

\*RPC-compatible servers.\*

**RPyC** - (Remote Python Call) - A transparent and symmetric RPC library for Python

(<https://github.com/tomerfiliba/rpyc>)

**zeroRPC** - zerorpc is a flexible RPC implementation based on [ZeroMQ](<http://zeromq.org/>) and

[MessagePack](<http://msgpack.org/>). (<https://github.com/0rpc/zerorpc-python>)

## Science

\*Libraries for scientific computing. Also see **Python-for-Scientists**.\*

**astropy** - A community Python library for Astronomy. (<http://www.astropy.org/>)

**bcbio-nextgen** - Providing best-practice pipelines for fully automated high throughput sequencing analysis.

(<https://github.com/chapmanb/bcbio-nextgen>)

**bccb** - Collection of useful code related to biological analysis. (<https://github.com/chapmanb/bcbb>)



**Biopython** - Biopython is a set of freely available tools for biological computation.

([http://biopython.org/wiki/Main\\_Page](http://biopython.org/wiki/Main_Page))

**cclib** - A library for parsing and interpreting the results of computational chemistry packages.

(<http://cclib.github.io/>)

**Colour** - Implementing a comprehensive number of colour theory transformations and algorithms.

(<http://colour-science.org/>)

**Karate Club** - Unsupervised machine learning toolbox for graph structured data.

(<https://github.com/benedekrozemberczki/karateclub>)

**NetworkX** - A high-productivity software for complex networks. (<https://networkx.github.io/>)

**NIPY** - A collection of neuroimaging toolkits. (<http://nipy.org>)

**NumPy** - A fundamental package for scientific computing with Python. (<http://www.numpy.org/>)

**ObsPy** - A Python toolbox for seismology. (<https://github.com/obspy/obspy/wiki/>)

**Open Babel** - A chemical toolbox designed to speak the many languages of chemical data.

(<https://open-babel.readthedocs.io/>)

**PyDy** - Short for Python Dynamics, used to assist with workflow in the modeling of dynamic motion.

(<http://www.pydy.org/>)

**PyMC** - Markov Chain Monte Carlo sampling toolkit. (<https://github.com/pymc-devs/pymc3>)

**QuTiP** - Quantum Toolbox in Python. (<http://qutip.org/>)

**RDKit** - Cheminformatics and Machine Learning Software. (<http://www.rdkit.org/>)

**SciPy** - A Python-based ecosystem of open-source software for mathematics, science, and engineering.

(<https://www.scipy.org/>)

**SimPy** - A process-based discrete-event simulation framework. (<https://gitlab.com/team-simpy/simpy>)

**statsmodels** - Statistical modeling and econometrics in Python. (<https://github.com/statsmodels/statsmodels>)

**SymPy** - A Python library for symbolic mathematics. (<https://github.com/sympy/sympy>)

**Zipline** - A Pythonic algorithmic trading library. (<https://github.com/quantopian/zipline>)

## Search

\*Libraries and software for indexing and performing search queries on data.\*

**django-haystack** - Modular search for Django. (<https://github.com/django-haystack/django-haystack>)

**elasticsearch-dsl-py** - The official high-level Python client for Elasticsearch.

(<https://github.com/elastic/elasticsearch-dsl-py>)

**elasticsearch-py** - The official low-level Python client for

[Elasticsearch](<https://www.elastic.co/products/elasticsearch>). (<https://www.elastic.co/guide/en/elasticsearch/c...>)

**pysolr** - A lightweight Python wrapper for [Apache Solr](<https://lucene.apache.org/solr/>).

(<https://github.com/django-haystack/pysolr>)

**whoosh** - A fast, pure Python search engine library. (<http://whoosh.readthedocs.io/en/latest/>)

## Serialization

\*Libraries for serializing complex data types\*

**marshmallow** - A lightweight library for converting complex objects to and from simple Python datatypes.

(<https://github.com/marshmallow-code/marshmallow>)

**pysimdjson** - A Python bindings for [simdjson](https://github.com/lemire/simdjson).  
(https://github.com/TkTech/pysimdjson)

**python-rapidjson** - A Python wrapper around [RapidJSON](https://github.com/Tencent/rapidjson).  
(https://github.com/python-rapidjson/python-rapi...)

**ultrajson** - A fast JSON decoder and encoder written in C with Python bindings.  
(https://github.com/esnme/ultrajson)

## Serverless Frameworks

\*Frameworks for developing serverless Python code.\*

**python-lambda** - A toolkit for developing and deploying Python code in AWS Lambda.  
(https://github.com/nficano/python-lambda)

**Zappa** - A tool for deploying WSGI applications on AWS Lambda and API Gateway.  
(https://github.com/zappa/Zappa)

## Shell

\*Shells based on Python.\*

**xonsh** - A Python-powered, cross-platform, Unix-gazing shell language and command prompt.  
(https://github.com/xonsh/xonsh/)

## Specific Formats Processing

\*Libraries for parsing and manipulating specific text formats.\*

\* General

**tablib** - A module for Tabular Datasets in XLS, CSV, JSON, YAML. (https://github.com/jazzband/tablib)

\* Office

**docxtpl** - Editing a docx document by jinja2 template (https://github.com/elapouya/python-docx-template)

**openpyxl** - A library for reading and writing Excel 2010 xlsx/xlsm/xltx/xltn files.  
(https://openpyxl.readthedocs.io/en/stable/)

**pyexcel** - Providing one API for reading, manipulating and writing csv, ods, xls, xlsx and xlsx files.  
(https://github.com/pyexcel/pyexcel)

**python-docx** - Reads, queries and modifies Microsoft Word 2007/2008 docx files.  
(https://github.com/python-openxml/python-docx)

**python-pptx** - Python library for creating and updating PowerPoint (.pptx) files.  
(https://github.com/scanny/python-pptx)

**unoconv** - Convert between any document format supported by LibreOffice/OpenOffice.  
(https://github.com/unoconv/unoconv)

**XlsxWriter** - A Python module for creating Excel .xlsx files. (https://github.com/jmcnamara/XlsxWriter)

**xlwings** - A BSD-licensed library that makes it easy to call Python from Excel and vice versa.  
(https://github.com/ZoomerAnalytics/xlwings)

**xlwt** - / [xlrd](https://github.com/python-excel/xlrd) - Writing and reading data and formatting information from Excel files. (https://github.com/python-excel/xlwt)

\* PDF

**pdfminer.six** - Pdfminer.six is a community maintained fork of the original PDFMiner.

(<https://github.com/pdfminer/pdfminer.six>)

**PyPDF2** - A library capable of splitting, merging and transforming PDF pages.

(<https://github.com/mstamy2/PyPDF2>)

**ReportLab** - Allowing Rapid creation of rich PDF documents. (<https://www.reportlab.com/opensource/>)

#### \* Markdown

**Mistune** - Fastest and full featured pure Python parsers of Markdown. (<https://github.com/lepture/mistune>)

**Python-Markdown** - A Python implementation of John Gruber's Markdown.

(<https://github.com/waylan/Python-Markdown>)

#### \* YAML

**PyYAML** - YAML implementations for Python. (<http://pyyaml.org/>)

#### \* CSV

**csvkit** - Utilities for converting to and working with CSV. (<https://github.com/wireservice/csvkit>)

#### \* Archive

**unp** - A command line tool that can unpack archives easily. (<https://github.com/mitsuhiko/unp>)

## Static Site Generator

\*Static site generator is a software that takes some text + templates as input and produces HTML files on the output.\*

**lektor** - An easy to use static CMS and blog engine. (<https://github.com/lektor/lektor>)

**makesite** - Simple, lightweight, and magic-free static site/blog generator (< 130 lines).

(<https://github.com/sunainapai/makesite>)

**mkdocs** - Markdown friendly documentation generator. (<https://github.com/mkdocs/mkdocs/>)

**nikola** - A static website and blog generator. (<https://github.com/getnikola/nikola>)

**pelican** - Static site generator that supports Markdown and reST syntax. (<https://github.com/getpelican/pelican>)

## Tagging

\*Libraries for tagging items.\*

**django-taggit** - Simple tagging for Django. (<https://github.com/jazzband/django-taggit>)

## Task Queues

\*Libraries for working with task queues.\*

**celery** - An asynchronous task queue/job queue based on distributed message passing.

(<https://docs.celeryproject.org/en/stable/>)

**dramatiq** - A fast and reliable background task processing library for Python 3.

(<https://github.com/Bogdanp/dramatiq>)

**huey** - Little multi-threaded task queue. (<https://github.com/coleifer/huey>)

**mrq** - A distributed worker task queue in Python using Redis & gevent. (<https://github.com/pricingassistant/mrq>)

**rq** - Simple job queues for Python. (<https://github.com/rq/rq>)

## Template Engine

\*Libraries and tools for templating and lexing.\*

**Genshi** - Python templating toolkit for generation of web-aware output. (<https://genshi.edgewall.org/>)

**Jinja2** - A modern and designer friendly templating language. (<https://github.com/pallets/jinja>)

**Mako** - Hyperfast and lightweight templating for the Python platform. (<http://www.makotemplates.org/>)

## Testing

\*Libraries for testing codebases and generating test data.\*

\* Testing Frameworks

**hypothesis** - Hypothesis is an advanced Quickcheck style property based testing library. (<https://github.com/HypothesisWorks/hypothesis>)

**nose2** - The successor to `nose`, based on `unittest2`. (<https://github.com/nose-devs/nose2>)

**pytest** - A mature full-featured Python testing tool. (<https://docs.pytest.org/en/latest/>)

**Robot Framework** - A generic test automation framework. (<https://github.com/robotframework/robotframework>)

**unittest** - (Python standard library) Unit testing framework. (<https://docs.python.org/3/library/unittest.html>)

\* Test Runners

**green** - A clean, colorful test runner. (<https://github.com/CleanCut/green>)

**mamba** - The definitive testing tool for Python. Born under the banner of BDD. (<http://nestorsalceda.github.io/mamba/>)

**tox** - Auto builds and tests distributions in multiple Python versions (<https://tox.readthedocs.io/en/latest/>)

\* GUI / Web Testing

**locust** - Scalable user load testing tool written in Python. (<https://github.com/locustio/locust>)

**PyAutoGUI** - PyAutoGUI is a cross-platform GUI automation Python module for human beings. (<https://github.com/asweigart/pyautogui>)

**Schemathesis** - A tool for automatic property-based testing of web applications built with Open API / Swagger specifications. (<https://github.com/kiwicom/schemathesis>)

**Selenium** - Python bindings for [Selenium](<http://www.seleniumhq.org/>) WebDriver. (<https://pypi.org/project/selenium/>)

**sixpack** - A language-agnostic A/B Testing framework. (<https://github.com/seatgeek/sixpack>)

**splinter** - Open source tool for testing web applications. (<https://github.com/cobrateam/splinter>)

\* Mock

**doublex** - Powerful test doubles framework for Python. (<https://pypi.org/project/doublex/>)

**freezegun** - Travel through time by mocking the datetime module. (<https://github.com/spulec/freezegun>)

**httmock** - A mocking library for requests for Python 2.6+ and 3.2+. (<https://github.com/patrys/httmock>)

**httpretty** - HTTP request mock tool for Python. (<https://github.com/gabrielfalcao/HTTPretty>)

**mock** - (Python standard library) A mocking and patching library. (<https://docs.python.org/3/library/unittest.mock...>)

**mocket** - A socket mock framework with gevent/asyncio/SSL support. (<https://github.com/mindflayer/python-mocket>)

**responses** - A utility library for mocking out the requests Python library. (<https://github.com/getsentry/responses>)

**VCR.py** - Record and replay HTTP interactions on your tests. (<https://github.com/kevin1024/vcrpy>)

\* Object Factories

**factory\_boy** - A test fixtures replacement for Python. ([https://github.com/FactoryBoy/factory\\_boy](https://github.com/FactoryBoy/factory_boy))

**mixer** - Another fixtures replacement. Supports Django, Flask, SQLAlchemy, Peewee and etc. (<https://github.com/klen/mixer>)

**model\_mommy** - Creating random fixtures for testing in Django. ([https://github.com/vandersonmota/model\\_mommy](https://github.com/vandersonmota/model_mommy))

\* Code Coverage

**coverage** - Code coverage measurement. (<https://pypi.org/project/coverage/>)

\* Fake Data

**fake2db** - Fake database generator. (<https://github.com/emirozer/fake2db>)

**faker** - A Python package that generates fake data. (<https://github.com/joke2k/faker>)

**mimesis** - is a Python library that help you generate fake data. (<https://github.com/lk-geimfari/mimesis>)

**radar** - Generate random datetime / time. (<https://pypi.org/project/radar/>)

## Text Processing

\*Libraries for parsing and manipulating plain texts.\*

\* General

**chardet** - Python 2/3 compatible character encoding detector. (<https://github.com/chardet/chardet>)

**difflib** - (Python standard library) Helpers for computing deltas. (<https://docs.python.org/3/library/difflib.html>)

**ftfy** - Makes Unicode text less broken and more consistent automagically. (<https://github.com/LuminosolInsight/python-ffty>)

**fuzzywuzzy** - Fuzzy String Matching. (<https://github.com/seatgeek/fuzzywuzzy>)

**Levenshtein** - Fast computation of Levenshtein distance and string similarity. (<https://github.com/ztane/python-Levenshtein/>)

**pangu.py** - Paranoid text spacing. (<https://github.com/vinta/pangu.py>)

**pyfiglet** - An implementation of figlet written in Python. (<https://github.com/pwaller/pyfiglet>)

**pypinyin** - Convert Chinese hanzi (中) to pinyin (音). (<https://github.com/mozillazg/python-pinyin>)

**textdistance** - Compute distance between sequences with 30+ algorithms. (<https://github.com/orsinium/textdistance>)

**unidecode** - ASCII transliterations of Unicode text. (<https://pypi.org/project/Unidecode/>)

\* Slugify

**awesome-slugify** - A Python slugify library that can preserve unicode. (<https://github.com/dimka665/awesome-slugify>)

**python-slugify** - A Python slugify library that translates unicode to ASCII. (<https://github.com/un33k/python-slugify>)

**unicode-slugify** - A slugifier that generates unicode slugs with Django as a dependency. (<https://github.com/mozilla/unicode-slugify>)

\* Unique identifiers

**hashids** - Implementation of [hashids](http://hashids.org) in Python.

(<https://github.com/davidaurelio/hashids-python>)

**shortuuid** - A generator library for concise, unambiguous and URL-safe UUIDs.

(<https://github.com/skorokithakis/shortuuid>)

#### \* Parser

**ply** - Implementation of lex and yacc parsing tools for Python. (<https://github.com/dabeaz/ply>)

**pygments** - A generic syntax highlighter. (<http://pygments.org/>)

**pyparsing** - A general purpose framework for generating parsers. (<https://github.com/pyparsing/pyparsing>)

**python-nameparser** - Parsing human names into their individual components.

(<https://github.com/derek73/python-nameparser>)

**python-phonenumbers** - Parsing, formatting, storing and validating international phone numbers.

(<https://github.com/daviddrysdale/python-phonenu...>)

**python-user-agents** - Browser user agent parser. (<https://github.com/selwin/python-user-agents>)

**sqlparse** - A non-validating SQL parser. (<https://github.com/andialbrecht/sqlparse>)

## Third-party APIs

\*Libraries for accessing third party services APIs. Also see **List of Python API Wrappers and Libraries**.\*

**apache-libcloud** - One Python library for all clouds. (<https://libcloud.apache.org/>)

**boto3** - Python interface to Amazon Web Services. (<https://github.com/boto/boto3>)

**django-wordpress** - WordPress models and views for Django.

(<https://github.com/istrategylabs/django-wordpress>)

**facebook-sdk** - Facebook Platform Python SDK. (<https://github.com/mobolic/facebook-sdk>)

**google-api-python-client** - Google APIs Client Library for Python.

(<https://github.com/google/google-api-python-cli...>)

**gsread** - Google Spreadsheets Python API. (<https://github.com/burnash/gspread>)

**twython** - A Python wrapper for the Twitter API. (<https://github.com/ryanmcgrath/twython>)

## URL Manipulation

\*Libraries for parsing URLs.\*

**furl** - A small Python library that makes parsing and manipulating URLs easy. (<https://github.com/gruns/furl>)

**purl** - A simple, immutable URL class with a clean API for interrogation and manipulation.

(<https://github.com/codeinthehole/purl>)

**pyshorteners** - A pure Python URL shortening lib. (<https://github.com/ellisonleao/pyshorteners>)

**webargs** - A friendly library for parsing HTTP request arguments with built-in support for popular web frameworks. (<https://github.com/marshmallow-code/webargs>)

## Video

\*Libraries for manipulating video and GIFs.\*

**moviepy** - A module for script-based movie editing with many formats, including animated GIFs.

(<https://zulko.github.io/moviepy/>)

**scikit-video** - Video processing routines for SciPy. (<https://github.com/aizvorski/scikit-video>)

**vidgear** - Most Powerful multi-threaded Video Processing framework. (<https://github.com/abhiTronix/vidgear>)

## Web Asset Management

\*Tools for managing, compressing and minifying website assets.\*

**django-compressor** - Compresses linked and inline JavaScript or CSS into a single cached file.  
(<https://github.com/django-compressor/django-com...>)

**django-pipeline** - An asset packaging library for Django. (<https://github.com/jazzband/django-pipeline>)

**django-storages** - A collection of custom storage back ends for Django.  
(<https://github.com/jschneier/django-storages>)

**fanstatic** - Packages, optimizes, and serves static file dependencies as Python packages.  
(<http://www.fanstatic.org/en/latest/>)

**fileconveyor** - A daemon to detect and sync files to CDNs, S3 and FTP. (<http://wimleers.com/fileconveyor>)

**flask-assets** - Helps you integrate webassets into your Flask app. (<https://github.com/miracle2k/flask-assets>)

**webassets** - Bundles, optimizes, and manages unique cache-busting URLs for static resources.  
(<https://github.com/miracle2k/webassets>)

## Web Content Extracting

\*Libraries for extracting web contents.\*

**html2text** - Convert HTML to Markdown-formatted text. (<https://github.com/Alir3z4/html2text>)

**lassie** - Web Content Retrieval for Humans. (<https://github.com/michaelhelmick/lassie>)

**micawber** - A small library for extracting rich content from URLs. (<https://github.com/coleifer/micawber>)

**newspaper** - News extraction, article extraction and content curation in Python.  
(<https://github.com/codelucas/newspaper>)

**python-readability** - Fast Python port of arc90's readability tool. (<https://github.com/buriy/python-readability>)

**requests-html** - Pythonic HTML Parsing for Humans. (<https://github.com/psf/requests-html>)

**sumy** - A module for automatic summarization of text documents and HTML pages.  
(<https://github.com/miso-belica/sumy>)

**textract** - Extract text from any document, Word, PowerPoint, PDFs, etc.  
(<https://github.com/deanmalmgren/textract>)

**toapi** - Every web site provides APIs. (<https://github.com/gaojiuli/toapi>)

## Web Crawling

\*Libraries to automate web scraping.\*

**feedparser** - Universal feed parser. (<https://github.com/kurtmckee/feedparser>)

**grab** - Site scraping framework. (<https://github.com/lorien/grab>)

**mechanicalsoup** - A Python library for automating interaction with websites.  
(<https://github.com/MechanicalSoup/MechanicalSoup>)

**scrapy** - A fast high-level screen scraping and web crawling framework. (<https://github.com/scrapy/scrapy>)



## Web Frameworks

\*Traditional full stack web frameworks. Also see **RESTful API**.\*

\* Synchronous

**django** - The most popular web framework in Python. (<https://github.com/django/django>)

**awesome-django** - (<https://github.com/shahraizali/awesome-django>)

**awesome-django** - (<https://github.com/wsvincent/awesome-django>)

**flask** - A microframework for Python. (<https://github.com/pallets/flask>)

**awesome-flask** - (<https://github.com/humiaozuzu/awesome-flask>)

**pyramid** - A small, fast, down-to-earth, open source Python web framework. (<https://pylonsproject.org/>)

**awesome-pyramid** - (<https://github.com/uralbash/awesome-pyramid>)

**masonite** - The modern and developer centric Python web framework.  
(<https://github.com/MasoniteFramework/masonite>)

\* Asynchronous

**tornado** - A web framework and asynchronous networking library. (<https://github.com/tornadoweb/tornado>)

## WebSocket

\*Libraries for working with WebSocket.\*

**autobahn-python** - WebSocket & WAMP for Python on Twisted and [asyncio](<https://docs.python.org/3/library/asyncio.html>). (<https://github.com/crossbario/autobahn-python>)

**channels** - Developer-friendly asynchrony for Django. (<https://github.com/django/channels>)

**websockets** - A library for building WebSocket servers and clients with a focus on correctness and simplicity.  
(<https://github.com/augustin/websockets>)

## WSGI Servers

\*WSGI-compatible web servers.\*

**gunicorn** - Pre-forked, ported from Ruby's Unicorn project. (<https://github.com/benoitc/gunicorn>)

**uwsgi** - A project aims at developing a full stack for building hosting services, written in C.  
(<https://uwsgi-docs.readthedocs.io/en/latest/>)

**waitress** - Multi-threaded, powers Pyramid. (<https://github.com/Pylons/waitress>)

**werkzeug** - A WSGI utility library for Python that powers Flask and can easily be embedded into your own projects. (<https://github.com/pallets/werkzeug>)

## Resources

Where to discover learning resources or new Python libraries.

## Newsletters

**Awesome Python Newsletter** - (<http://python.libhunt.com/newsletter>)

**Pycoder's Weekly** - (<https://pycoders.com/>)



**Python Tricks** - (<https://realpython.com/python-tricks/>)

**Python Weekly** - (<https://www.pythonweekly.com/>)

## Podcasts

**Django Chat** - (<https://djangochat.com/>)

**Python Bytes** - (<https://pythonbytes.fm>)

**Python Test** - (<https://podcast.pythontest.com/>)

**Talk Python To Me** - (<https://talkpython.fm/>)

**The Real Python Podcast** - (<https://realpython.com/podcasts/rpp/>)

## Contributing

Your contributions are always welcome! Please take a look at the **contribution guidelines** first.

If you have any question about this opinionated list, do not hesitate to contact me **@VintaChen** on Twitter or open an issue on GitHub.