

NumPy
SciPy
pandas
scikit-learn
NLTK
PyMC

The PyData Ecosystem

A Python-based ecosystem of open source software for acquiring, preparing, querying, analyzing, and visualizing data sets.

Get Started



Interests

Data Science



Organize and analyze large amounts of data, translating results into solutions

Go

Visualization



Represent data and results using charts, graphs, maps, and other techniques

Go

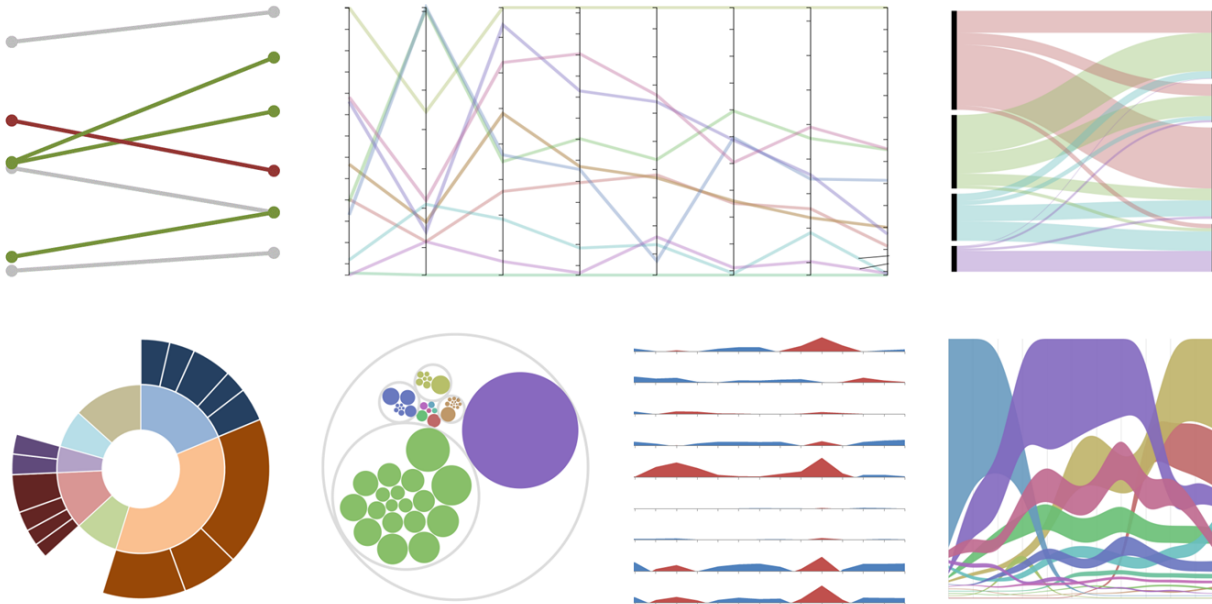
Life Sciences



Use the NumPy ecosystem for life sciences research projects

Go

Visualization



Visualization tools display data in a visual form that can highlight important features, relationships, commonalities, and anomalies. Visualization is often an important first step when exploring data sets, and it is important for summarizing and communicating results. As such, it can be useful during several phases of an analytic project:

Acquire → Process → Explore → (Transform → Analyze → Visualize) → Communicate

Next: add descriptions of visualization tools such as *matplotlib*, *seaborn*, *Bokeh*, *ggplot*, *Pygal*, *Plotly*, and *geoplotlib*. Descriptions could include the following:

- Overview
- Use cases, differentiators (types of plots, size of data sets, types of user interfaces and APIs supported)
- Links to the tools

This information could be summarized with a set of documentation maps: “If you want to ..., see ... <link>.” For an example, see the table after “Alright, So Which Should I Use?” at <https://realpython.com/python-histograms/>

Image courtesy of Evan Sinar on medium.com

Tool differentiator notes courtesy of James Bednar, <https://www.anaconda.com/python-data-visualization-2018-why-so-many-libraries/>

Site mockup used the [Hugo Fresh theme](#).