

# Intro to Bokeh

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# A Brief of History of Bokeh

First initial release: April 2013

Current Version: 1.3.4 (Aug 2019). Updated regularly

Current core team: Sarah Bird, Bryan Van de Ven

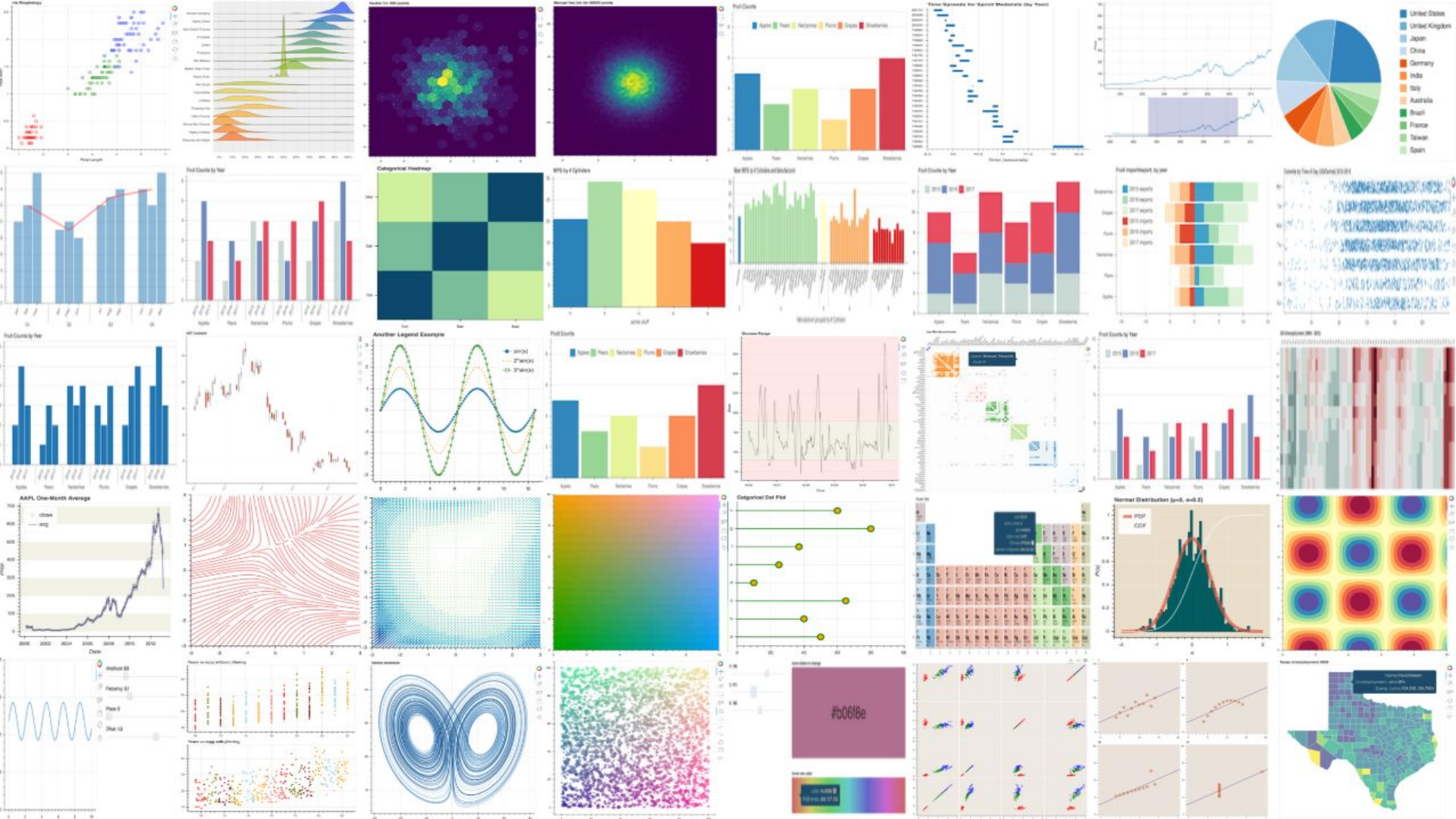
Currently a popular visualization tool for its benefits



# What is Bokeh?

Bokeh is designed to target modern web browsers for presentation over large datasets







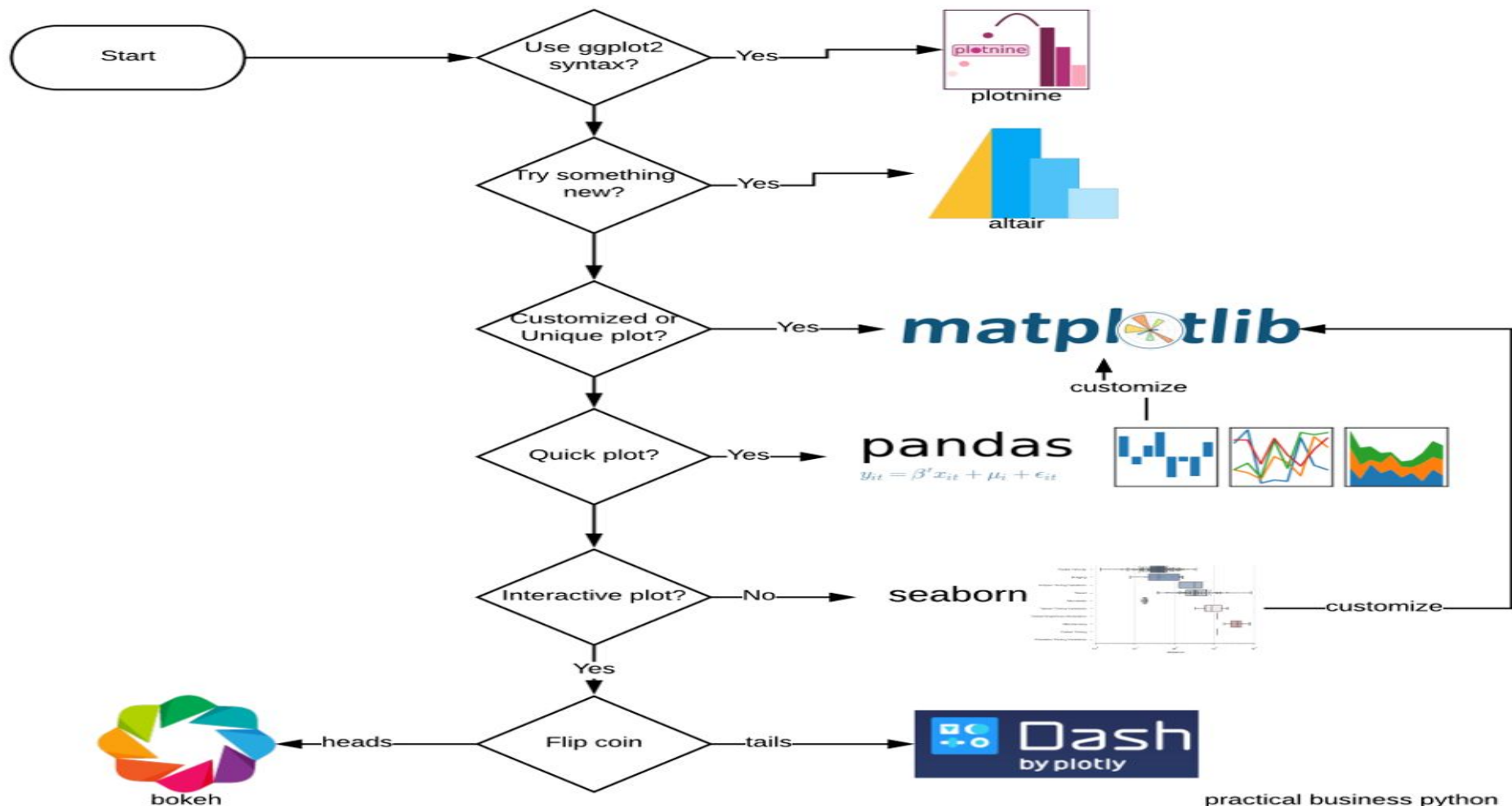
# Bokeh vs. Other Interactive Tools

- Interactive
- Render its graphic using HTML and JavaScript -> Set up and deploy your own visualization server directly and quickly.

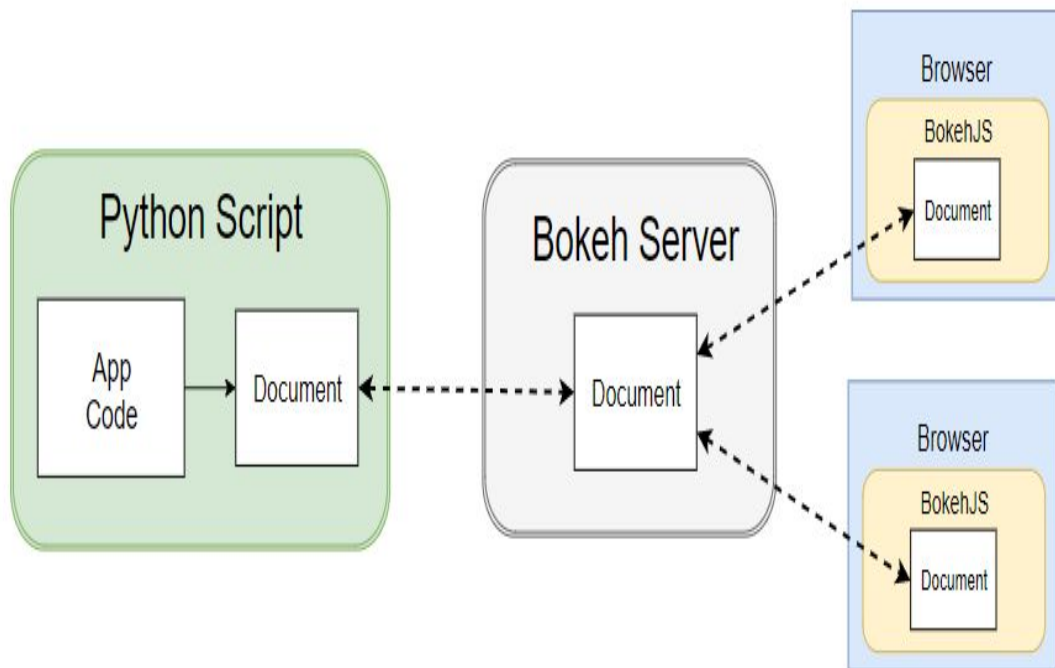
<https://demo.bokeh.org/gapminder>



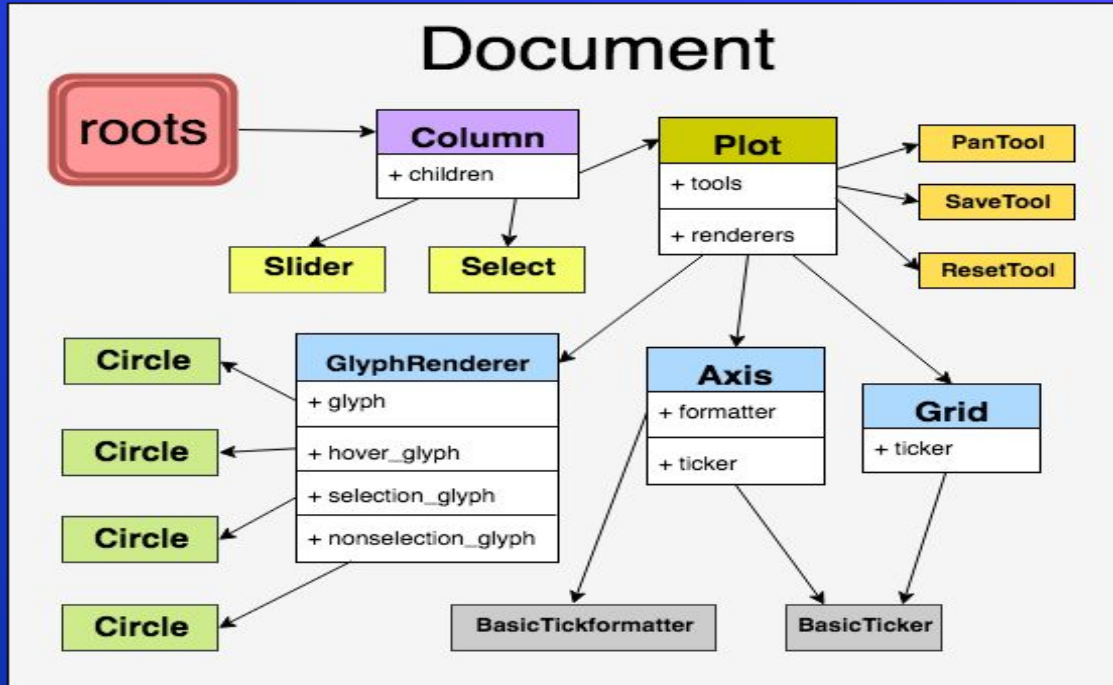
# Choosing a python visualization tool



# Bokeh Server



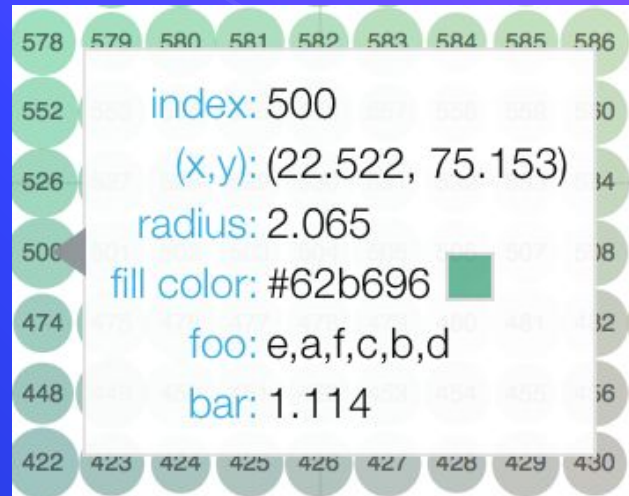
# Models and Primitives





# Other Advantages

- ⬡ Bokeh Works Great in Jupyter Notebooks
- ⬡ Themes
- ⬡ Ease of Integration with Pandas ([ColumnDataSource](#))
- ⬡ Exporting to HTML is a Breeze
- ⬡ Intelligent Suggestions on Errors
- ⬡ Easy Interactivity ([HoverTool](#))



# Instal Bokeh:

⬡ Bokeh is officially supported (and continuously tested) on CPython versions 2.7 and 3.5+ only.

⬡ Require dependencies:

```
Jinja2 >=2.7
numpy >=1.7.1
packaging >=16.8
pillow >=4.0
python-dateutil >=2.1
PyYAML >=3.10
six >=1.5.2
tornado >=4.3
```

- ⬡ Installation
  - ❖ pip install bokeh
  - ❖ Conda install bokeh

⬡ Verifying Installation

```
Python 3.7.0 (default, Jun 28 2018, 07:39:16)
[Clang 4.0.1 (tags/RELEASE_401/final)] :: Anaconda custom (64-bit) on darwin
Type "help", "copyright", "credits" or "license" for more information.
>>> import bokeh
>>> bokeh.__version__
'1.0.0'
>>> █
```

# Bokeh Demo



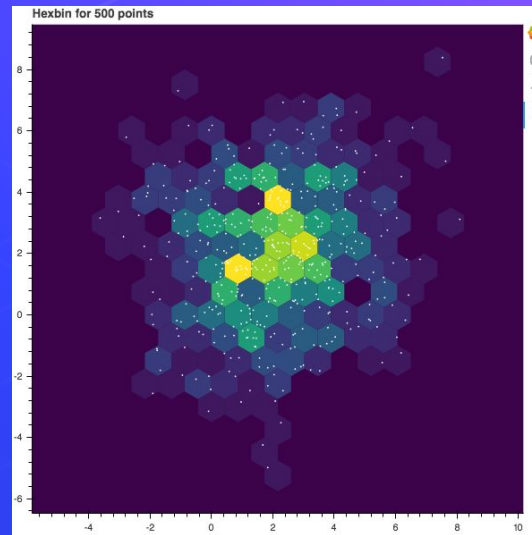
# Examples with Jupyter Notebook:

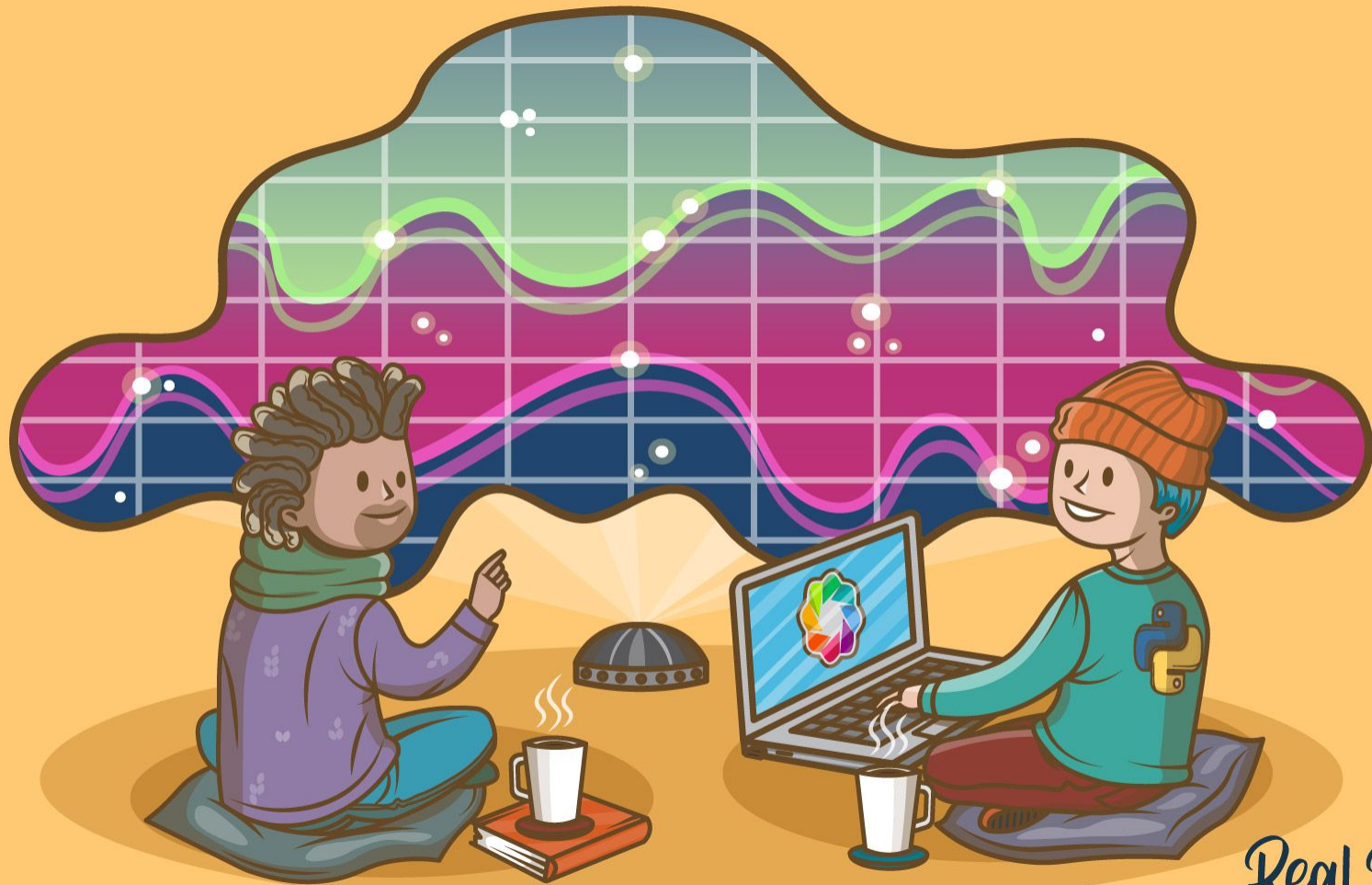
## Basic plotting

[https://bokeh.pydata.org/en/latest/docs/user\\_guide/quickstart.html](https://bokeh.pydata.org/en/latest/docs/user_guide/quickstart.html)

## 12 of the Highest Horsepower Cars in the World

<https://www.motortrend.com/news/highest-horsepower-sports-cars-100000/>





Real Python



# Thank you for your attention

Any questions?



# Appendix

<https://pbpython.com/visualization-tools-1.html>

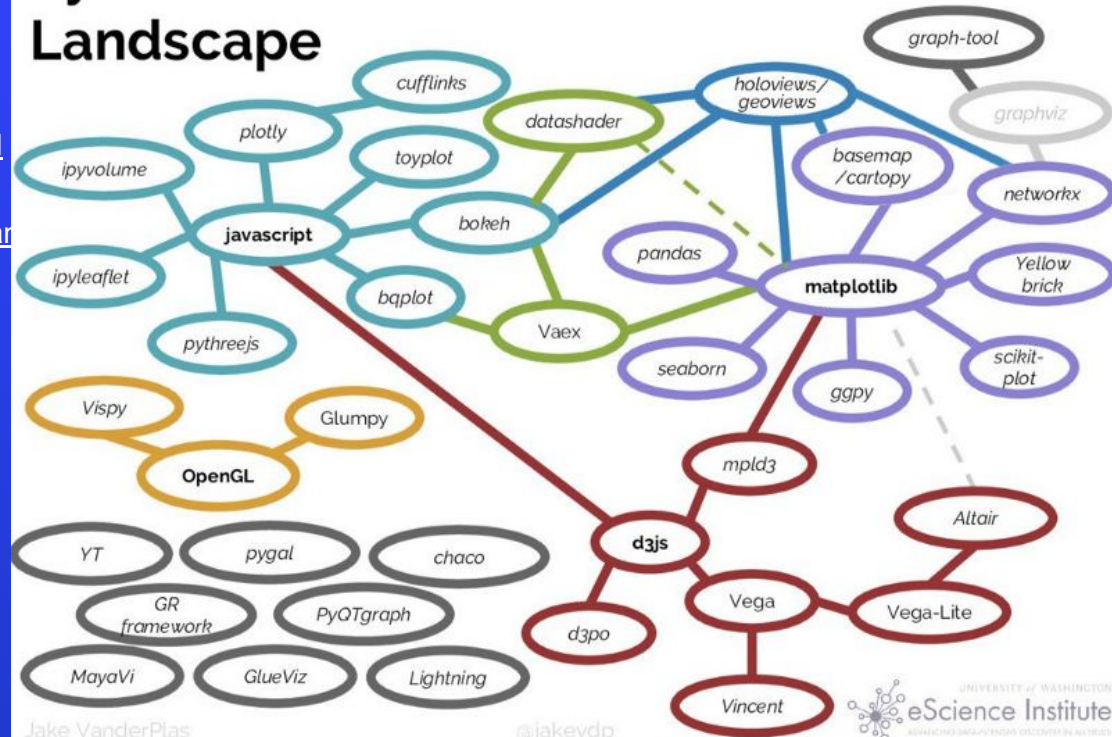
<https://bokeh.pydata.org/en/latest/docs/releases.html>

<https://bokeh.pydata.org/en/latest/docs/installation.html>

[https://github.com/bradtraversy/python\\_bokeh\\_chart](https://github.com/bradtraversy/python_bokeh_chart)

<https://bokeh.pydata.org/en/latest/docs/gallery.html#star>

## Python's Visualization Landscape



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UNIVERSITY OF WASHINGTON  
eScience Institute  
ACCELERATING DATA-DRIVEN DISCOVERY IN NO TIME

