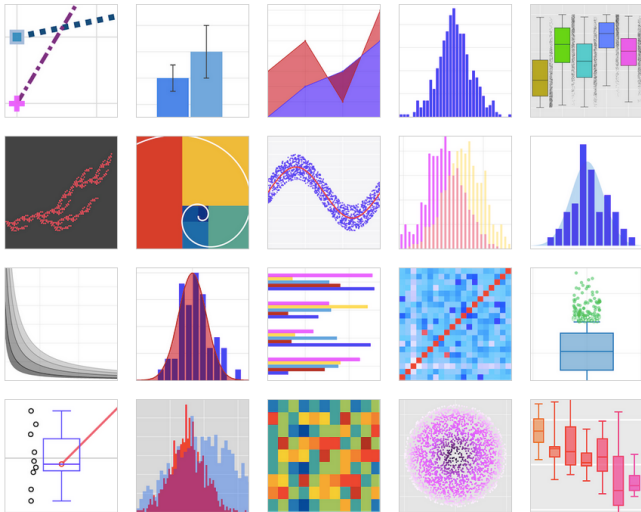




- ▶ Kevin O'Brien
- ▶ Fatima-Zahra Jaouimaa
(University of Limerick)



Kevin O'Brien

- ▶ Background in Statistical Computing (R, Python, Julia, SPSS, SAS)
- ▶ Formerly taught undergraduate statistics and analytics courses at University of Limerick.
- ▶ Work with a lot of career-young professionals.
- ▶ I have no connection to `plot.ly`

About plotLy (from company site)

plotly is the state of the art in data visualization, dashboards, and collaborative analysis, that can be used to make carts and dashboards.



WELCOME TO THE

Plotly API libraries

D3.js charts and maps for Python, MATLAB, R and more.

- plotly's graphing libraries makes interactive, publication-quality graphs online, with libraries for Python, R, MATLAB, Perl, Julia, Arduino, and REST.



Plotly Python
API



Plotly MATLAB
API



Plotly R API



Plotly
JavaScript
Graphing
Library

Technology

- ▶ Plotly was built in Python and the Django framework, with a front end using JavaScript – primarily the visualization library D3, HTML and CSS.
- ▶ Files are hosted on Amazon S3.
- ▶ Visualizations can't be viewed unless they're shared even if someone guesses the URL.



What is plotly.js?

Built on top of `d3.js` and stack.gl, `plotly.js` is a high-level, declarative charting library. `plotly.js` ships with 20 chart types, including 3D charts, statistical graphs, and SVG maps.

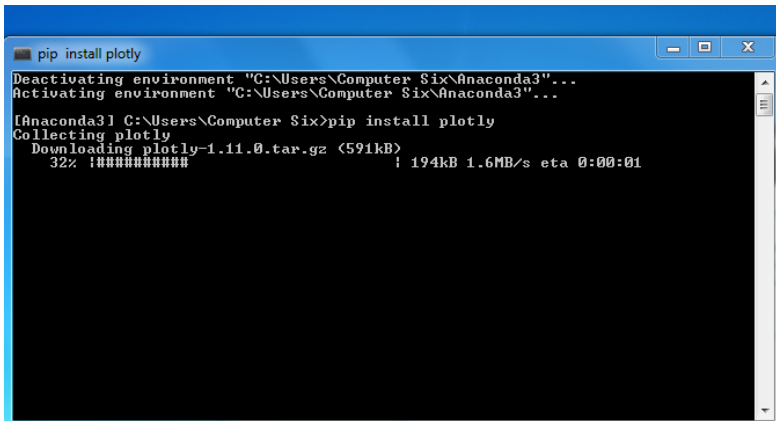
Learn about [why we open sourced plotly.js](#) or [view the source on GitHub](#).

Built on top of `d3.js` and `stack.gl`, `plotly.js` is a high-level, declarative charting library.

Source: `http://plot.ly/javascript/`

Installation

```
pip install plotly
```



```
pip install plotly

Deactivating environment "C:\Users\Computer Six\Anaconda3"...
Activating environment "C:\Users\Computer Six\Anaconda3"...

[Anaconda3] C:\Users\Computer Six>pip install plotly
Collecting plotly
  Downloading plotly-1.11.0.tar.gz (591kB)
    32% ##### | 194kB 1.6MB/s eta 0:00:01
```

GitHub



My plotLy Account



DragonflyStats

DragonflyStats's projects

SHOW

☒ Plots ☒ Grids ☒ Folders ☐

SORT BY

Modified



finance

Initialization for Online Plotting (*from www.plot.ly*)

- ▶ plotly provides a web-service for hosting graphs!
- ▶ Create a free account to get started.
- ▶ Graphs are saved inside your online plotly account and you control the privacy.

Accessing Your Account

```
import plotly

plotly.tools.set_credentials_file(
    username='DemoAccount',
    api_key='lr1c37zw81')
```

Find your API key on your account page.

`plot()` and `ipplot()`

- ▶ When plotting online, the plot and data will be saved to your plotly account.
- ▶ There are two methods for plotting online:
`py.plot()` and `py.ipplot()`.
Both options create a unique url for the plot and save it in your plotly account.
- ▶ Use `py.plot()` to return the unique url and optionally open the url.
- ▶ Use `py.ipplot()` when working in a Jupyter Notebook to display the plot in the notebook.

OHLC chart

- ▶ OHLC or open-high-low-close chart is a type of chart used to illustrate how the price of a stock or bond changed over time.
- ▶ Vertical line on the chart shows the price range (the highest and lowest prices).