# Topic Outline: Matplotlib Graphics

Revised: March 1, 2016

#### Materials

- Today's handouts: this outline, book chapter, code practice, stickers
- All posted on *Topic list & links* page of website (except the stickers)

#### **Preliminaries**

- Tools and buzzwords
  - IPython notebooks in Jupyter.
  - Graphing with Matplotlib: dataframe plot methods, figure and axis objects.
- What is this?
  - Package
  - Pandas
  - Jupyter
- Download IPython notebook

 $https://github.com/DaveBackus/Data\_Bootcamp/blob/master/Code/IPython/bootcamp\_graphics\_1.ipynb$ 

and save in Data\_Bootcamp directory

• Start Jupyter and open notebook

## Python graphics: Introduction to Matplotlib

We'll follow the notebook:

- Jupyter
- Markdown
- Preliminaries: import statements, dataframes to work with
- Graphing in Excel
- Apply plot methods to dataframes
- plot(x,y)
- Figure and axis objects

- Recap
- Bells and whistles
- Examples
- Review
  - Put red sticker on, replace with green when done

## Examples

If time permits, we'll go through some examples of economic and financial data and its properties. It's an IPython notebook that you can view on the GitHub repo: the Code/IPython directory, file bootcamp\_examples.ipynb.

### After class

- Required
  - Nothing
- Recommended (always)
  - Write: After class, write down everything you remember without using your notes
  - Review: Reread the chapter and fill in anything you missed.
  - Code Practice A