The Jupyter Notebook

Improve the transparency and replicability of your research without compromising efficiency
What is the Jupyter Notebook?

Open source, interactive data science and scientific computing across over 40 programming languages.

The Jupyter Notebook is a web application that allows you to create and share documents that contain live code, equations, visualizations and explanatory text. Uses include: data cleaning and transformation, numerical simulation, statistical modeling, machine learning and much more.
Demonstration

```python
import ipystata
from IPython.display import Image

words = ['But', 'also', 'live', 'code']
for i in words:
    print(i)

##

\$\frac{\text{Earnings}_t - \text{Earnings}_{t-1}}{\text{MV}_{t-2}}\$

##

Image(r'Example/Images/table1a.png', width=700)
```
Demonstration

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##

$\text{Scaled change in Earnings}_t: \frac{(Earnings_t-Earnings_{t-1})}{MV_{t-2}}$

##

Image(r'Example/Images/table1a.png', width=700)
The Jupyter Notebook is language agnostic

• Supported languages:
  - Python
  - Stata (IPyStata, created and maintained by me)
  - R
  - SAS
  - MATLAB
  - And many others!

• Also, multiple languages in one Notebook!
  - For example: combine Python, Stata, and R all in one notebook.
Jupyter Notebook + Version Control

- Officially supported by GitHub

Code, results, comments, etc. all under version control!
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Interactivity
Interactivity
How to start using the Jupyter Notebook?

• Check out my `getting started` tutorial on GitHub:


• Official website:

  http://www.jupyter.org/

• Try it out in your browser:

  https://try.jupyter.org/