

Setting Up a Virtual Environment for Jupyter Notebook

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Jupyter Notebook in a virtual environment (virtualenv)

Make sure you have virtualenv installed

```
pip install virtualenv
```

Create a virtual environment

Note: I like to use a . in front of my virtual environments so the folder is hidden. virtualenv .venv

Get inside the environment

source .venv/bin/activate or in shorthand . .venv/bin/activate You can verify quickly you are in the environment by running which python which will return the path of the python executable in the environment if all went well which python

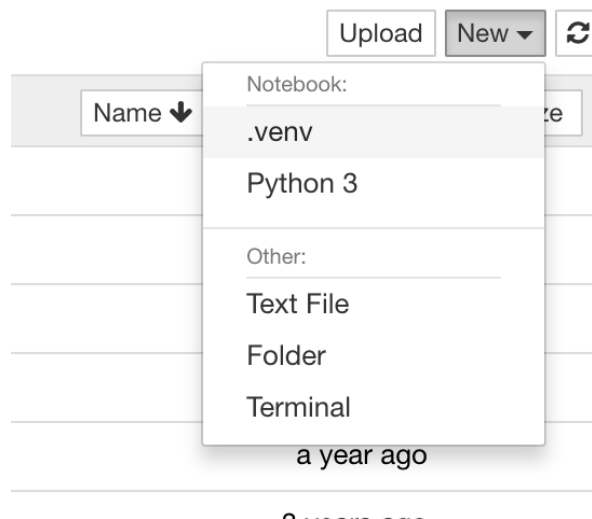
```
xxxxx/.venv/bin/python
```

Install a Jupyter kernel

This will install a kernel inside the environment, to use to run in the Jupyter notebook there:
ipython kernel install --user --name=.venv

Run Jupyter, and select the .venv kernel to run the notebook

```
jupyter notebook
```



Exporting to PDF Using L^AT_EX

Setup of Document

You will need some text in the preamble of the document in order to render it properly in PDF.

Put the following text as a raw cell at the beginning of the document:

```

\setcounter{secnumdepth}{0}
\title{Setting Up a Virtual Environment for Jupyter Notebook}
\author{Alexei Marcilio}
\date{\today}
\maketitle
\thispagestyle{empty}
\newpage
\pagenumbering{arabic}

```

Use this document as a reference. The code above sets the title, Author, and date on a title page.

It removes the numbering from the title page and it creates a table of contents.

In addition the numbering for the section headers is removed.

Inserting Images

Use the following code to insert pictures into the document. It's important to use the complete path in the name of the png file.

```

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{/Users/alexeimarcilio/gbc/init_setup/pic1.png}
\caption{Here is my image}
\label{image-myimage}
\end{figure}

```

Saving the file

From the jupyter notebook menu select:

- File ... Download as
- \LaTeX (.tex)

This will open up the \LaTeX editor. In the editor:

- Remove the maktitle command (this creates another title page)
- Select Typset from Typset in the main menu to create a PDF file.
- You will have to run Typset twice if you have a table of contents

GitHub

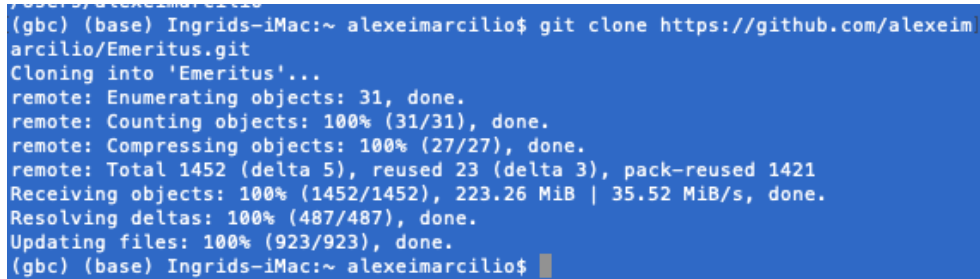
Clone of GitHub Repository Locally

We have a repository on GitHub called Emeritus. Let's add it locally to a new computer:

- Log into GitHub
- Navigate to the repository and select the **Code** button
- Copy the contents of the HTTP box
- Open a local terminal window

- Change the current working directory to the location where you want the cloned directory
- Type `git clone`, then paste the URL you copied earlier:

```
git clone https://github.com/alexeimarcilio/Emeritus.git
```



```
(gbc) (base) Ingrid's-iMac:~ alexeimarcilio$ git clone https://github.com/alexeimarcilio/Emeritus.git
Cloning into 'Emeritus'...
remote: Enumerating objects: 31, done.
remote: Counting objects: 100% (31/31), done.
remote: Compressing objects: 100% (27/27), done.
remote: Total 1452 (delta 5), reused 23 (delta 3), pack-reused 1421
Receiving objects: 100% (1452/1452), 223.26 MiB | 35.52 MiB/s, done.
Resolving deltas: 100% (487/487), done.
Updating files: 100% (923/923), done.
(gbc) (base) Ingrid's-iMac:~ alexeimarcilio$
```

- Now you are good to go

Create a New GitHub & Local Repository

Use GitHub to back up all your work:

- Log into your GitHub account
- Create a new GitHub repository and make sure to include a README file
- Create the local repository as described above

Using Git

If you're in the directory of the git repository there are a few basic commands that will allow you to back up everything to GitHub remotely.

The commands are `git status`, `git commit`, `git add`, and `git push`

You can check the current status at any time by using the `git status` command. You can add any files to git by using the `git add` command. This is usually done by adding all files, for example:

```
git add .
```

To commit the changes type `commit` and include a comment in the following way:

```
git commit -m "comment"
```

Finally to push the changes up to your GitHub repository do the following:

```
git push
```

[]: