(mailto:ahluwalia.pr@northeastern.edu) (http://github.com/pranavwalia)

Pranav on Data Science (/)

C++ For Jupyter Notebook

NOVEMBER 28TH, 2020

When I'm experimenting with models I typically prefer to have my math and code in the same place. Python is the language of choice for data scientists as it integrates seamlessly with Jupyter Notebook (https://jupyter.org/) allowing for carefully placed analysis and explanations alongside code modules. However, recently I've been working on integrating a model into a piece of software where low latency is vital. C++ was the obvious answer in terms of language choice. I began looking for an interactive computing solution in C++ and eventually came across Xeus (https://github.com/jupyter-xeus/xeus); a C++ kernel for Jupyter Notebook (https://jupyter.org/) and Xeus-Cling (https://github.com/jupyter-xeus/xeus-cling); a C++ interpreter. Together, these two frameworks allow for seamless interactive computing.

Requirements:

- Mac OS/Linux/(Windows is still experimental at the time of this article)
- Conda package manager

Step 1: Install Conda

- Download the conda (https://www.anaconda.com/products/individual) package manager and install the appropriate version for your operating system

Step 2: Setup

Before you install the modules, you want to set up your own environment to prevent conflicts with your default setup. Open up a terminal and type 'conda activate'. Enter the following commands

```
conda create -n cling
```

Next, you want to install cling to your particular environment.

```
conda install xeus-cling -c conda-forge
```

Finally, install Xeus:

```
conda install xeus -c conda-forge
```

Step 3: Open A Notebook

Open a shell and switch to your cling environment.

```
conda activate cling
```

Open a notebook

```
jupyter notebook
```

You should now see the option to create a C++ notebook in Jupyter.

Computer Science (4) , (/categories.html#Computer Science-ref)
C++ (1) (/categories.html#C++-ref)

C++ (1) (/tags.html#C++-ref)

Share Post

Twitter (http://twitter.com/share?text=C++ For Jupyter Notebook)

Facebook (https://www.facebook.com/sharer/sharer.php) Google+

Pranav Ahluwalia

My name is Pranav Ahluwalia. I am a Data Scientist and avid poker player
More About Me (https://www.prandev.com)

← Previous (/monte-carlo-options-python) Next → (/continuity-uniform-continuity)