TAMS ARTIFICIAL INTELLIGENCE SOCIETY

2021 - 2022

Setup for Code GAs

9/8/2021

Lesson Plan

- Setup Anaconda
- Terminal - Git Bash
- Data Science Libraries
- Machine Learning Libraries
- IDE - JupyterLab Notebooks

Setup Anaconda

1. Go to www.anaconda.com/products/individual
2. Click Download and click link that corresponds to your OS and version (Can be found in About PC)
3. Wait for the download (It might take a while)
4. Go through Installer Wizard with recommended features and installations

   ** Remember where your “anaconda3” folder is
5. Open Application “Anaconda Navigator”

Installing the Git Bash Terminal

1. Go to www.git-scm.com/downloads
2. Click on corresponding OS and wait for download
3. Go through Setup Wizard with recommended options and installations
4. Open application “Git Bash”

Setting up conda on Git bash

1. In File Explorer go to the anaconda3 folder and then etc -> profile.d and right click on conda.sh file (the one with file type “Shell Script”)
2. Click “Git Bash Here” (If this option doesn’t come up click on blank area of File Explorer and right click on conda.sh)
3. Type the following commands into the terminal:

```
echo “. ‘${PWD}’/conda.sh” >> ~/.bashrc

echo “conda activate” >> ~/.bashrc
```

4. Reopen Git Bash

Setting up Libraries

1. In Git Bash type the following command to install PyTorch:

```
conda install -c pytorch pytorch
```

2. Once it says “Proceed?” hit enter (This might take a while and we don’t need torch rn so we’ll move on)

* If you’ve alr used conda and might alr have PyTorch, use the following command to check if you have it in your current env:

```
conda list | grep [package name]
```

3. PyTorch is not the only package we’ll use but the rest should’ve come with conda (Pandas, Scikit, etc.), but use the following command if you end up missing anything:

```
conda install [package name]
```

What are these Libraries?

- Data Science Libraries
  - Pandas
  - Numpy
  - MatplotLib
- Machine Learning Libraries
  - Scikit Learn
  - PyTorch

Get to know the JupyterLab IDE

1. Open application “Anaconda Navigator”
2. Click Launch under “JupyterLab”
3. On the left, open Documents, make a new folder called “AIS Code” or something similar
4. On the Launcher click new Ipython Notebook (.ipynb file)
5. This is how you will make code files for your projects and code with AIS
6. If you’re curious, check out the other IDEs on the Navigator (IBM WSC, Spyder, etc.)