

Environment Setup for CS/INFO 4300

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Forward

To eliminate dependency clashes and difficulties on your end we will be using Anaconda (Conda) and its environments. With conda, you can create, export, list, remove, and update environments that have different versions of Python and/or packages installed in them. We will be continuously updating the necessary packages for each project and will make it clear before every assignment if there is a change to your environment. The following guide allows for you to have the same environment as we use for grading. As such, it is imperative that you compile and run your IPython Notebooks using our dependencies and versioning. We are not responsible for broken imports that cause your functions to break. For example is it imperative that you use **Python 2.7**. The following guide helps you setup this environment. **NOTE:** If you have any problems with the instructions below please post all your questions on piazza.

Conda Installation

Windows

- 1.) Download the Anaconda Installer which can be found here

- Accept the default location or select a user-writable install location such as `C:\[user-name]\anaconda`
- Install as administrator

2.) Ensure that conda is setup by executing this in command prompt:

```
conda env --help
```

3.) Setup conda environment. * First check current conda environments that you may have

```
conda env list
```

- If this is your first time installing Anaconda you should just see root

4.) Create a new env provided the environments.yml file we provided you

```
conda env create -f environment.yml
```

5.) Check if env was created by running:

```
conda env list
```

- You should see both root and cs4300 now

6.) To work in our conda env you must activate it

```
activate cs4300
```

- To leave environment

```
deactivate cs4300
```

OSX

1.) Download the command line installer for Anaconda with Python 2.7 found here

- For this class we will be using Python 2.7
- Accept the default location or select a user-writable install location such as `~/anaconda`
- Install as administrator who has access to sudo

2.) Open Terminal or iTerm2 and execute

```
bash ~/Downloads/Anaconda2-4.2.0-MacOSX-x86_64.sh
```

- This is under the assumption that your downloads are stored in your Downloads folder

3.) Either allow the installer to update your `bash_profile` or update it yourself *
Add line:

```
export PATH="$HOME/anaconda/bin:$PATH"
```

4.) Execute source to ensure that bash_profile has been updated

```
source ~/.bash_profile
```

5.) Ensure that conda is setup by executing:

```
conda env --help
```

6.) Setup conda environment: * First check current conda environments that you may have

```
conda env list
```

- If this is your first time installing Anaconda you should just see root

7.) Create a new env provided the environments.yml file we provided you

```
conda env create -f environment.yml
```

8.) Check if env was created by running:

```
conda env list
```

- You should see both root and cs4300 now

9.) To work in our conda env you must activate it:

```
source activate cs4300
```

- To leave environment:

```
source deactivate cs4300
```

Linux/Ubuntu

1.) Download the command line installer for Anaconda with Python 2.7 found here * Accept the default location or select a user-writable install location such as ~/anaconda

- Install as administrator who has access to sudo

2.) Open terminal window and execute

```
bash ~/Downloads/Anaconda2-4.2.0-Linux-x86_64.sh
```

- This is under the assumption that your downloads are stored in your Downloads folder.

3.) Either allow the installer to update your bash_profile or update it yourself *
Add line:

```
export PATH="$HOME/anaconda/bin:$PATH"
```

4.) Execute source to ensure that bash_profile has been updated

```
source ~/.bash_profile
```

5.) Ensure that conda is setup by executing:

```
conda env --help
```

6.) Setup conda environment. * First check current conda environments that you may have

```
conda env list
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- If this is your first time installing Anaconda you should just see root

7.) Create a new env provided the environment.yml file we provided you

```
conda env create -f environment.yml
```

8.) Check if env was created by running:

```
conda env list
```

- You should see both root and cs4300 now

9.) To work in our conda env you must activate it

```
source activate cs4300
```

- To leave environment

```
source deactivate cs4300
```

Guidelines

Always remain in the cs4300 conda environment when working on your assignments to ensure that the TAs do not have clashing dependencies