## Windows Installation of zellegraphics

1) Check that Python is installed on your laptop by looking for one of the directories:

C:\Program Files\Python34
C:\Python34
C:\Program Files(x86)\Python34

Regardless of where it's installed, let's call the installed directory **PYTHON\_DIR**. If Python is not installed, follow the instructions linked from the **Other** tab on the index page to install it.

If it is not in any of those, go to C:\Users\<USERNAME>\AppData\Local\Programs\Python

**VSERNAME>** is the name of the account on the computer you are using. **AppData** folder is hidden in the File Explorer in Windows, you must the address bar to get there.

- 2) Download the **zellegraphics** module (John Zelle's Python Graphics module → Save Link as) from the **Graphics** tab on the index page
  - a) Place it in the folder **PYTHON\_DIR**\Lib\site-packages

Potential "gotchas": (1) That is **Lib**, not *libs*, in the path.

- 3) To verify your installation:
  - a) Click Start  $\rightarrow$  All Programs  $\rightarrow$  Python 3.4  $\rightarrow$  IDLE (Python GUI) to Launch IDLE
  - b) At the prompt type: from zellegraphics import \* press ENTER

If you do not get an error message, then the installation was successful.

## Mac Installation of zellegraphics

- 1) Check that Python3 is installed on your MacBook:
  - a) Launch a Terminal by clicking Finder → Applications. Expand "Utilities" then double-click on Terminal.
  - b) Type:

    python3 --version

    press ENTER

You should see Python 3.4.3 (or some other version number, e.g, 3.4.4). If not, install Python by following the instructions linked from the **Other** tab on the index page.

2) At the Terminal, type:

```
python3
press ENTER
```

This will take you to the python interactive console.

3) At the console, type:

```
import site
press ENTER
site.getsitepackages()
press ENTER
```

You should see a **list of locations** displayed in the console.

- 4) Download the **zellegraphics** module from the **Graphics** tab on the index page into your **Downloads** folder.
  - a) Back in the Terminal, copy the first location in the list from **Step 3**) above to your clipboard.

- b) Close the python console by typing **exit()** in it then pressing ENTER.
- c) While you are still at Terminal, change directory to the location you copied by entering the command cd <PASTE\_COPIED\_LOCATION\_HERE>.
- d) Place the downloaded zellegraphics module in that location by entering the following command at the Terminal.

cp ~/Downloads/ zellegraphics.py .

- 5) To verify your installation:
  - a) Reopen the python console by typing the following at the Terminal: python3 press ENTER
  - b) In the console, type: from zellegraphics import \* press ENTER

If you do not get an error message, then the installation was successful.

## PI Installation of zellegraphics

Using a Rose-Hulman Pi, the zellegraphics file will be in the right place.

- 1) To verify your installation:
  - a) Open a terminal and launch idle3
  - b) At the prompt type:
    from zellegraphics import \*
    press ENTER

If you do not get an error message, then the installation was successful.