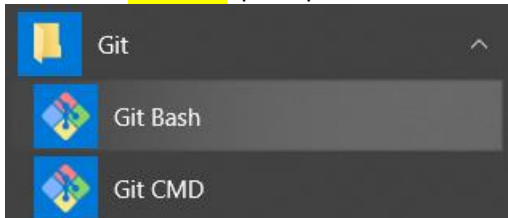


1- Installing the Allen Institute Brain Modeling Toolkit (BMTK)

Installation/Setup

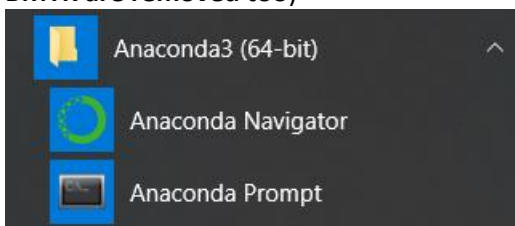
1. You must have Anaconda3 and Neuron installed correctly for BMTK to work. Details at the end of this document.
2. You must also install a git client to get the latest BMTK code. Download and install Git for Windows at (<https://git-scm.com/download/win>) and install with all the default settings.
3. From the 'Git Bash' prompt installed earlier execute the following commands:



```
cd C:/Users/<your_username>/Desktop
mkdir temp_bmtk_install
cd temp_bmtk_install
git clone https://github.com/AllenInstitute/bmtk
```

Now close the Git Bash Window

4. Next, run **setup** and **install** from the **Anaconda Prompt** (We will also ensure that **old versions of BMTK are removed too**)



```
cd C:\Users\<your_username>\Desktop\temp_bmtk_install\bmtk
pip uninstall bmtk
python setup.py install
```

You can now safely delete the temp_bmtk_install directory using the command

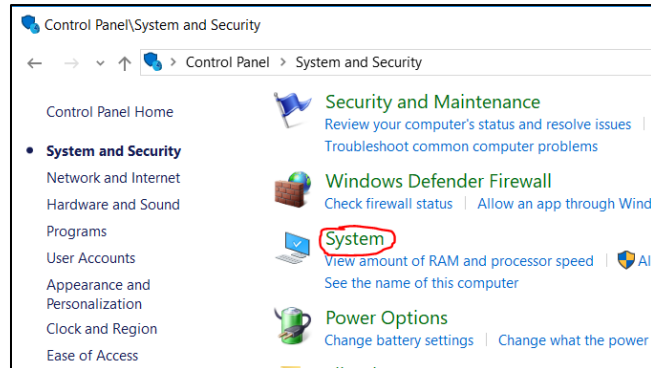
```
cd ../../
rd /s /q C:\Users\<your_username>\Desktop\temp_bmtk_install
```

SOME GENERAL INFORMATION

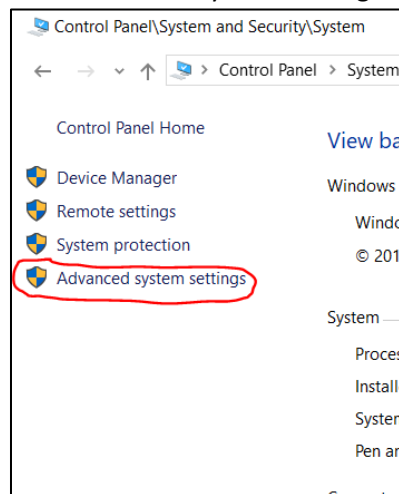
- Main reference for BMTK and BioNet: Gratiy et al. (2018) *BioNet*: A Python interface to NEURON for modeling large-scale networks. PLoS ONE 13(8): e0201630.
- BMTK is a python-based API to interface with NEURON, NEST,.....
- API (Application Programming Interface) is a protocol intended to be used as an interface by software components to communicate with each other. It is basically a set of programming instructions and standards for accessing web-based applications or web tools.
- JSON (Java Script Object Notation) is a lightweight data-interchange format. It is easy for humans to read and write. It is easy for machines to parse and generate. It is based on the Java programming language, Standard ECMA-262 3rd edition, Dec 1999
- See document “99-Additional_BMTK_info” for additional information

Anaconda/Neuron Installation

1. Download and install Anaconda3 (<https://www.anaconda.com/download/#download>)
2. Download and install Neuron (<https://www.neuron.yale.edu/neuron/download>)
3. Ensure your environment variables are set
 - a. Type 'control' in the windows search bar and click control panel
 - b. Click system and security
 - c. Click system



- d. Click 'advanced system settings'



- e. Click 'Environment Variables'
- f. Ensure that 'NEURONHOME' and 'PYTHONPATH' exist and point to the correct install locations

User variables for Tyler	
Variable	Value
NEURONHOME	c:\nrn
NO_PROXY	192.168.99.100
OneDrive	C:\Users\Tyler\OneDrive
Path	C:\Users\Tyler\AppData\Local
PYTHONPATH	c:\nrn\lib\python