

# Installation

# Windows OS/MacOSX

- Download Anaconda3 from the official webpage and run the .exe
  - [https://repo.anaconda.com/archive/Anaconda3-2019.03-MacOSX-x86\\_64.pkg](https://repo.anaconda.com/archive/Anaconda3-2019.03-MacOSX-x86_64.pkg)
  - [https://repo.anaconda.com/archive/Anaconda3-2019.03-Windows-x86\\_64.exe](https://repo.anaconda.com/archive/Anaconda3-2019.03-Windows-x86_64.exe)
- Download NEURON and run the .exe
  - [https://neuron.yale.edu/ftp/neuron/versions/v7.7/nrn-7.7.x86\\_64-osx.pkg](https://neuron.yale.edu/ftp/neuron/versions/v7.7/nrn-7.7.x86_64-osx.pkg)
  - <https://neuron.yale.edu/ftp/neuron/versions/v7.7/nrn-7.7.w64-mingwsetup.exe>

# Linux OS

- Download Anaconda 3
  - [https://repo.anaconda.com/archive/Anaconda3-2019.03-Linux-x86\\_64.sh](https://repo.anaconda.com/archive/Anaconda3-2019.03-Linux-x86_64.sh)
- On a terminal execute
  - `bash Anaconda3.sh`
- Follow the instructions, specify the installation folder, e.g., `/home/username/anaconda3`

# NEURON on Linux

(1)

- `sudo apt install libx11-dev git bison flex automake libtool libxext-dev libncurses-dev xfonts-100dpi libopenmpi-dev make zlib1g-dev`
- `mkdir neuron && cd neuron`
- `wget https://neuron.yale.edu/ftp/neuron/versions/v7.6/nrn-7.6.tar.gz`
- `Wget https://neuron.yale.edu/ftp/neuron/versions/v7.6/iv-19.tar.gz`
- `tar -xzf`
- `mv iv-* iv && mv nrn-* nrn`
- `cd iv/`
- `./configure --prefix=/your/folder/neuron/iv`
- `make -j`
- `make install -j`

(2)

- `cd .. && cd nrn/`
- `./configure --prefix=/your/folder/neuron/nrn --with-iv=/your/folder/neuron/iv --with-nrnpython=/home/username/anaconda3/bin/python`
- `make -j`
- `make install -j`
- `cd src/nrnpython`
- `/home/username/anaconda3/bin/python setup.py install`
- Edit your `.bashrc` file by adding
- `export PATH=$PATH:/your/folder/neuron/nrn/x86_64/bin`

(3)

- `cd /your/directory/neuron`
- `touch nrnenv`
- Edit `nrnenv` as
- Create an `nrnenv` file into neuron directory
- `export IV=/your/directory/neuron/iv`
- `export N=/your/directory/neuron/nrn`
- `# for this concrete example, we assume hostcpu is x86_64`
- `export CPU=x86_64`
- `export PATH="$IV/$CPU/bin:$N/$CPU/bin:$PATH"`

# NEURON on Linux

- `cd .. && cd nrn/`
- `./configure --prefix=/your/folder/neuron/nrn --with-iv=/your/folder/neuron/iv --with-nrnpython=/home/username/anaconda3/bin/python`
- `make -j`
- `make install -j`
- `cd src/nrnpython`
- `/home/username/anaconda3/bin/python setup.py install`
- Edit your `.bashrc` file by adding
- `export PATH=$PATH:/your/folder/neuron/nrn/x86_64/bin`

# NEURON Linux

- `cd /your/directory/neuron`
- `touch nrnenv`
- Edit `nrnenv` as
- Create an `nrnenv` file into neuron directory
- `export IV=/your/directory/neuron/iv`
- `export N=/your/directory/neuron/nrn`
- `#` for this concrete example, we assume `hostcpu` is `x86_64`
- `export CPU=x86_64`
- `export PATH="$IV/$CPU/bin:$N/$CPU/bin:$PATH"`