**Create onsets for MRI experiment with NeuroDesign**

1. First: run a short one to see that it works:
   1. Go to site: <http://neuropower-0-4.3piigm4m3u.us-west-1.elasticbeanstalk.com/design/start/>
   2. Fill in your design parameters and submit the process (‘run’ in the ‘console’ tab)
   3. After a short time, a ‘download script’ will appear. Download the script and copy it to your folder in the server.
   4. Open the script and edit the followings:
      1. Add in the beginning:

from neurodesign import geneticalgorithm, generate, msequence

from random import randint

RandSeed=randint(1000, 9999)

path='/DATA/schonberglab/Classic\_CAT/CreateOnsets/probe1/'

change the following from false to true:

hardprob = True

* + 1. Then edit the path and seed:

seed = RandSeed,

folder = path)

* 1. Edit the path to your output folder
  2. Run directly in the terminal
     1. Write in the terminal: module load python/anaconda2.440-python27
     2. Then run the code like so: Python “your\_file”
     3. If it worked, move on to run via launch
  3. Create a launch file. The line is:
     1. Python “your\_path\_your\_file”
  4. Run the launch file. Note! The launch command should be:
     1. Launch –s “your launch file” –j schonberglab -pv python/anaconda2.440-python27
     2. If it worked, move on to full run
  5. Edit the script as follows: (you can change these settings as you prefer)
     1. resolution = 0.1,
     2. preruncycles = 10000,
     3. cycles = 10000,
     4. convergence = 10000,
  6. Save one script for each design you need, and change the path to different folder (id you need 8 design for training, then you will have 8 scripts with different path (i.e. train1, train2 etc)
  7. Put all the scripts you want to run in the launch file (one run per script, starting with ‘python’
  8. Run the launch (remember to add -pv anaconda2.431-python27)

1. Enjoy ☺