Techniques for the visualization and improvement of brain structure descriptions

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NeuroTessMesh
Neuronal membrane representation

Multiresolution representation of the neuronal membrane

- Generation of a coarse mesh
- Starting from neuron morphology tracings
- GPU hardware tessellation
- Adaptive criterion to define the level of subdivision
Coarse mesh
Soma coarse mesh generation
Neuronal mesh refinement
NeuroEditor
Manual selection and edition
Automatic correction of tracing errors
Custom correction method

from StrFramework import *

class Strategy ( Container ) :

def method ( self ) :
    global inNodes
    global outNodes
    outNodes = []

    for i in range ( len ( inNodes ) ) :
        o = StrategyParams ()
        o . node . position . X = inNodes [ i ]. node . position . X
        o . node . position . Y = inNodes [ i ]. node . position . Y
        o . node . position . Z = 0
        o . node . radius = inNodes [ i ]. node . radius
        o . node . id = inNodes [ i ]. node . id
        outNodes . append ( o )
Links of interest

**NeuroTessMesh**: [http://gmrv.es/gmrvvis/NeuroTessMesh](http://gmrv.es/gmrvvis/NeuroTessMesh)
Source code: [https://github.com/gmrvvis/NeuroTessMesh](https://github.com/gmrvvis/NeuroTessMesh)

**NeuroEditor**: [http://gmrv.es/gmrvvis/NeuroEditor](http://gmrv.es/gmrvvis/NeuroEditor)
Source code: [https://github.com/gmrvvis/NeuroEditor](https://github.com/gmrvvis/NeuroEditor)

**neuroltos**: library to the reconstruction and representation of brain anatomy.
Source code: [https://github.com/gmrvvis/neurolots](https://github.com/gmrvvis/neurolots)

**GMRV Visualization website**: [http://gmrv.es/gmrvvis/](http://gmrv.es/gmrvvis/)

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