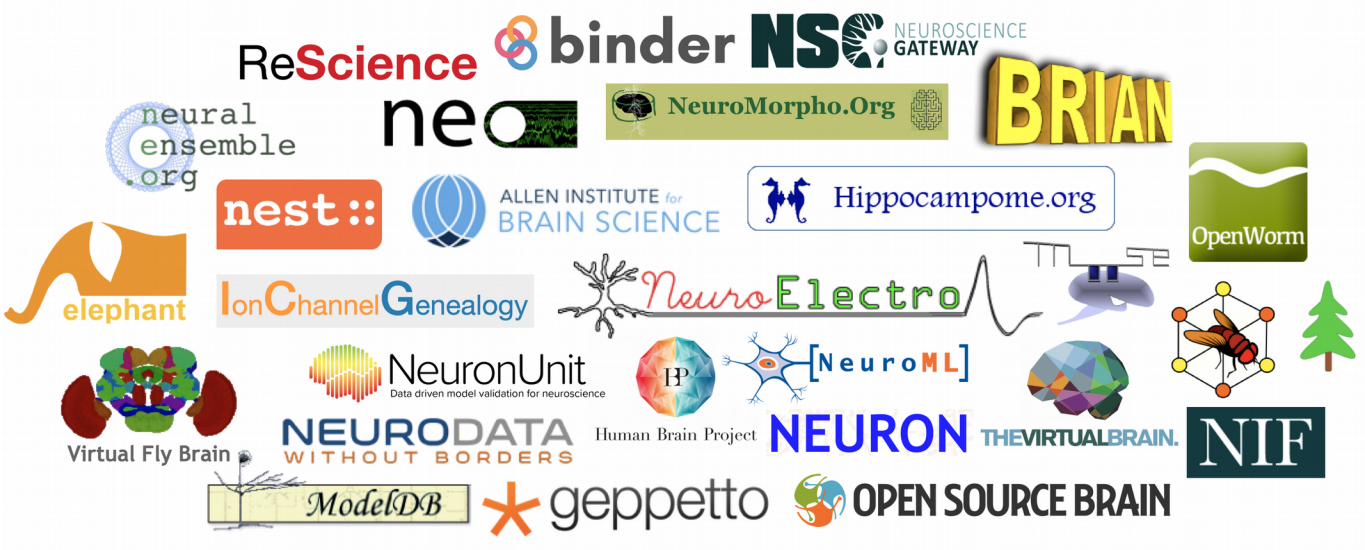
Neuroinformatics resources for computational modellers



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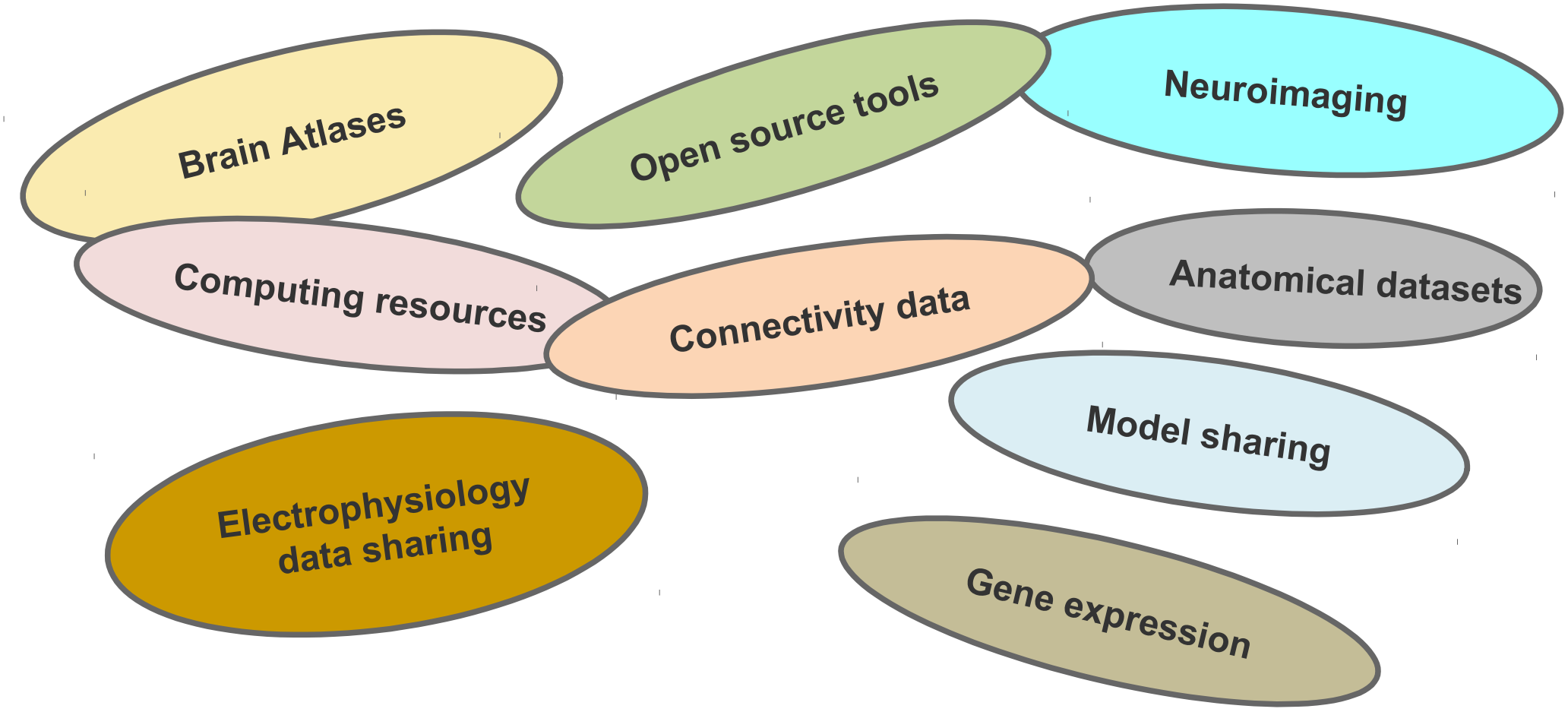
https://github.com/NeuralEnsemble/NeuroinformaticsTutorial/blob/master/CONTRIBUTORS.md

Introduction

Neuroinformatics (like computational neuroscience, connectomics, etc.) means many different things to different people…



Current tutorial

Focus on ***neuroinformatics resources*** *which may be of use for those* ***creating and analysing computational models of neuronal systems***

Topics

Experimental datasets

Structured data from literature

Analysis tools

Simulation environments

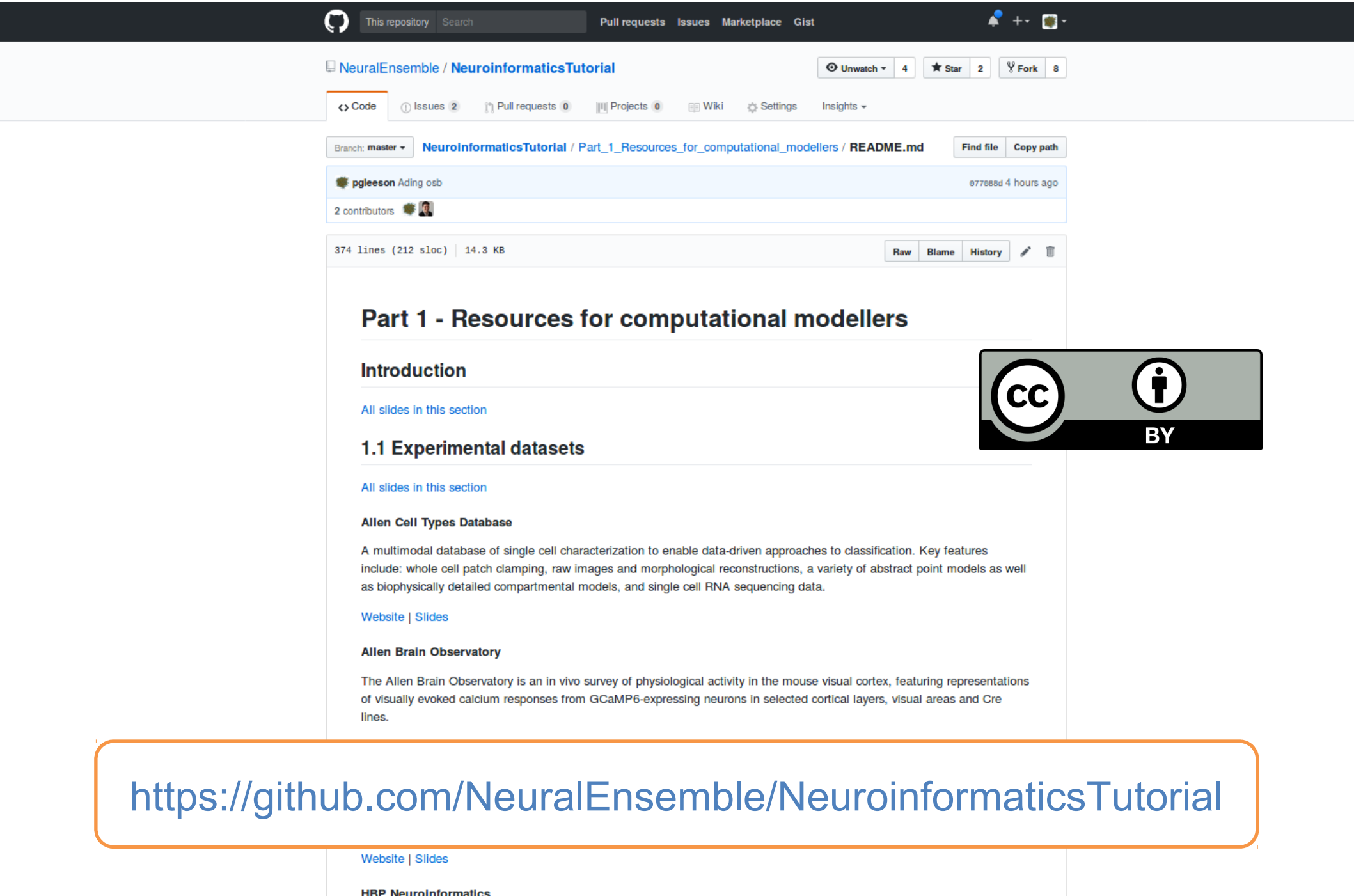
Model sharing

Computing infrastructure

Open source initiatives

Web portals

Online tutorial materials



https://github.com/NeuralEnsemble/NeuroinformaticsTutorial

Exercises

Hands on demonstrations

Human Brain Project Collaboratory

Run Allen Institute cell model on NSG via OSB

Demonstration of Neo/PyNN using Jupyter notebooks

Participant Exercises

Cell morphology from NeuroMorpho.Org visualised on Open Source Brain

Exploring Brain Circuits with the Fruit Fly Brain Observatory

OpenWorm tutorials

NeuralEnsemble / NeuroinformaticsTutorial

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Future additions? #6

Edit New issue

Open pgleeson opened this issue 12 days ago · 1 comment

pgleeson commented 12 days ago • edited Member

Can be added in future versions (though these are getting into the area of SW for comp neuro in general, rather than pure Neuroinformatics)

Model construction/management

neuroConstruct
NetPyNE
SimTracker
Sumatra
OpenCortex

Model optimisation

PyBlueOpt
Neurotune

Morphology reconstruction/analysis

BigNeuron (move here)
TREES Toolbox
CATMAID
Knossos
Vaa3D

Suggestions welcome!

apdavison commented 12 days ago Owner

Assignees
No one—assign yourself

Labels
None yet

Projects
None yet

Milestone
No milestone

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