Neuroinformatics resources for computational modellers

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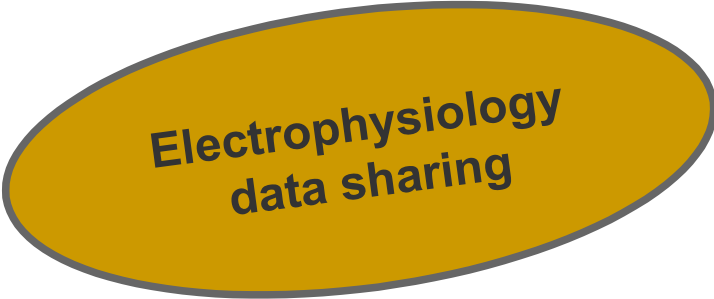
Introduction

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

Brain Atlases

Neuroimaging

Electrophysiology data sharing

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

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Branch: master ▾   **NeuroInformaticsTutorial** / **Part_1_Resources_for_computational_modellers** / **README.md**   Find file   Copy path

🟢 **pgleeson** Ading osb   077088d 4 hours ago

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Part 1 - Resources for computational modellers

Introduction

All slides in this section

1.1 Experimental datasets

All slides in this section

Allen Cell Types Database

A multimodal database of single cell characterization to enable data-driven approaches to classification. Key features include: whole cell patch clamping, raw images and morphological reconstructions, a variety of abstract point models as well as biophysically detailed compartmental models, and single cell RNA sequencing data.

Website | Slides

Allen Brain Observatory

The Allen Brain Observatory is an in vivo survey of physiological activity in the mouse visual cortex, featuring representations of visually evoked calcium responses from GCaMP6-expressing neurons in selected cortical layers, visual areas and Cre lines.

Website | Slides

CRCNS

A public repository hosting freely available neurophysiology and behavioural data useful for computational neuroscience. Includes data from a variety of species and brain regions and species.

Website | Slides

HBP NeuroInformatics

Exercises

Practicalities

(CNS Antwerp 15th July 2017)

Practicalities

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