



Guide to choosing a Theory project

July 5-23, 2021

Pure theory projects are usually pursued by more advanced students. If your group is relatively new to neuroscience, you should consider doing a dataset project *and* include a theory component to it.

Every group can bring up and discuss theory projects. We have two example project templates for this that include code. However, a theory project can go in any direction.

Run	View
Working memory	 

Contents

[Databases of models](#)

[Additional resources](#)

Print to PDF ▶

Databases of models

Here is a list of cool databases you might want to use to look for existing models, computational analyses / data processing tools and data.

Name	Model?	Analyses?	Data?	Description
BioModels	:+1:			BioModels is a repository of mathematical models of biological and biomedical systems. It hosts a vast selection of existing literature-based physiologically and pharmaceutically relevant mechanistic models in standard formats.
ModelDB	:+1:			ModelDB provides an accessible location for storing and efficiently retrieving computational neuroscience models. A ModelDB entry contains a model's source code, concise description, and a citation of the article that published it.
Open Source Brain	:+1:			Open Source Brain is a resource for sharing and collaboratively developing computational models of neural systems.
CRCNS	:+1:	:+1:	:+1:	CRCNS Data sharing website is a marketplace and discussion forum for sharing tools and data in neuroscience
EEGbase		:+1:	:+1:	EEGbase is a system for storage, management, sharing and retrieval of EEG/ERP data, metadata, tools and documents related to electrophysiology.
INCF resources	:+1:	:+1:	:+1:	A list of resources endorsed by INCF .
NITRC	:+1:	:+1:	:+1:	NeuroImaging Tools & Resources Collaboratory is an award-winning free web-based resource that offers comprehensive information on an ever expanding scope of neuroinformatics software and data.

Additional resources

Name	Description
figshare	A database of everything research related that's openly shared
Google Dataset search	Lets you do a Google search specifically to find datasets
NeuroVault	A public repository of unthresholded statistical maps, parcellations, and atlases of the brain. (MRI and PET)
KnowledgeSpace	A globally-used, community-based, data-driven encyclopedia for neuroscience that links brain research concepts to data, models, and the literature that support them.

By Neuromatch
© Copyright 2021.