
nept Documentation

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van der Meer lab

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nept is short for neuroelectrophysiology tools and is a library that we use in the [van der Meer lab](#) at Dartmouth College for analyzing neural electrophysiological recording data and associated behaviors.

Getting started

If you don't already have python 3, we recommend you download it using Miniconda from [Continuum Analytics](#).

We recommend using a separate python environment.

Open a **new** terminal, create and activate a new conda environment:

```
conda create -n yourenv python=3.5  
activate yourenv [Windows] or source activate yourenv [Linux]
```

Install package dependencies:

```
conda install matplotlib jupyter scipy numpy pandas pytest coverage
```

For Shapely, try:

```
pip install shapely
```

If that fails, in Windows, download the most recent wheel file [here](#). Once downloaded, install with wheel.

```
pip install yourshapelyinstall.whl
```

Installation

Clone nept from Github and use a developer installation:

```
git clone https://github.com/vandermeerlab/nept.git
```

Set up a developer installation:

```
cd nept
python setup.py develop
```

All set! You're ready to start using the nept module.

```
import nept
```

nept Objects

Objects in nept represent neural electrophysiology and behavioral data.

AnalogSignal

LocalFieldPotential

Position

Epoch

SpikeTrain

nept Modules

The nept modules are used for the analysis of neural electrophysiological recording data and associated behaviors.

nept.co_occurrence module

nept.decoding module

nept.lfp_filtering module

nept.loaders_mclust module

nept.loaders_neuralynx module

nept.maze_breakdown module

nept.medpc module

nept.place_fields module

nept.tuning_curves module

nept.utils module

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License

The nept library is free software, distributed under a MIT license.