Instructions

# Installation

## Compatible Operating Systems

* 64-bit Modern operating system (Windows, MacOS, Linux)

## Initial Algorithm Download

The algorithm can be accessed directly by navigation to the GitHub link page and selecting the green “code” button. Here you will have the option to install the algorithm files with GitHub file manager or to download a zip file directly to your computer. For those who are not familiar with advanced or custom software the zip file download (Mouse-Data-Cleaning.zip) is recommended. Once the zip file is downloaded to your computer, double click on the zip file to access the Mouse-Data-Cleaning files on your computer.

Once the files have been downloaded move them to a visible place on your computer. We would suggest placing the “Mouse-Data-Cleaning” on the desktop before proceeding with the rest of the instructions.

If any of the files become damaged or missing, reloading the files from GitHub is the best course of action. **Note, you will not need to perform the pre-requisite installation more than once on one computer.**

## Software Pre-requisite Installation

This next step will prepare your computer for the use of the algorithm and involves installing some pre-requisite software including python3 and some of its related packages. This operation will mainly take place using python package manager pip. As this algorithm uses python3 ensure that the commands “Python3” and “pip3” are used and not their equivalent to avoid using the wrong version of python installed on your system.

### Navigation:

The first step of this process is to open the “Terminal” application then navigating to the folder Mouse-Data-Cleaning that you have moved to your desktop (Note: The Terminal application is the command prompt on windows while it is accessed under the Utilities folder in Applications on MacOs). Enter the command “cd Desktop/ Mouse-Data-Cleaning” in Terminal. After pressing enter the names of the files should be found before the “%” in your terminal denoting the start of the command line input. All python files will be denoted by the ending ”.py”.

### Installation:

Now that we are in the correct folder in Terminal, we can now look at the contents of the “requirements.txt” file. This file contains the names of individual python packages to be installed in Terminal and saved in your operating system python distribution. Note: These files will not appear on the desktop after installation. This requirements.txt file contains the name of the package followed by the “~=” which denotes an equivalent or compatible software version to be requested in reference to version number feature at the end of each line.

## Running the Algorithm

First place the file and data folder that you wish to be processed in the same folder as the program on the desktop.

You will then have two options to run the program which include:

Jupiter Notebook: Running the command “jupyter notebook” will open a menu which will allow you to open the file “MouseData.ipynb” and run the algorithm by changing the file and heatmap variables at the top of the program.

Command Line: Running the command “python MouseData.py” will launch the program and allow you to enter the name of the files to be processed.