Gribble Lab Guides

Paul Gribble

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Table of contents

Welcome

You can find some useful guides here such as how to install and use Python environments.

These guides can be found on the web at: https://www.gribblelab.org/guides

You can download a .pdf version here: Gribble-Lab-Manual.pdf

You can download an .epub version here: Gribble-Lab-Manual.epub

Here is the link to head back to the Gribble Lab website

If there is anything you need to know and you can't find it here, get in touch with me

—Paul (he/him)

1 Python

The KINARM labs run on MATLAB but increasingly we are using Python to do our data analyses and computational modeling (e.g. MotorNet).

Here are some pointers to how to get going with Python, in particular virtual environments.

1.1 Install Python

On MacOS I like to install Python3 using the Homebrew package manager, like this:

```
brew install python3
```

1.2 Create a virtual environment

```
python3 -m venv my-venv
```

1.3 Activate a virtual environment

```
source my-venv/bin/activate
```

1.4 Install pip

`pip` is what we use to install packages so we need to install pip into our venv first:

```
python3 -m ensurepip
```

1.5 Install packages into a venv

For example to install numpy:

```
python3 -m pip install numpy
```

1.6 Snapshot all installed packages

```
python3 -m pip freeze > requirements.txt
```

This creates a file called `requirements.txt` that you can keep with your code, so that anyone can reproduce your entire python environment using venv (see below)

1.7 The `requirements.txt` file

```
python3 -m pip install -r requirements.txt
```

1.8 Deactivate a venv

```
deactivate
```