

# Conda Setup and Usage

## (miniconda version)

Conda is a package manager, allowing us to create environments in which we can install different versions of different packages. This is convenient and necessary for working on different projects that might require conflicting package versions.

## 1 Installing Miniconda

Download the latest miniconda installer matching to your system. For help regarding the installation and finding your system check the following sections.

### 1.1 Mac - Intel or M1

Click on the Apple logo in the top left corner, then click on *About this Mac*. Check under *Chip*.

### 1.2 Linux

Run the following command in your terminal

```
cat /etc/os-release
```

### 1.3 Windows - 32- or 64-bit?

Press **win** + **s** to open the search. Then search for *Control Panel* and click first on *Control Panel* and then *System*. Now check under *System Type* whether your system is 32bit or 64bit based.

## 2 Setting up a virtual environment

To set up a new environment (link), run the following command in your terminal:

```
conda create -n myenv python
```

To create a *Python* environment named *myenv*

### 2.1 from a environment.yml or requirements.txt

```
conda env create -f environment.yml
```

```
conda create --name myenv --file requirements.txt
```

## 3 Installing Packages

To add packages to our environment we first have to activate it. We can do that by running:

```
conda activate myenv
```

We can verify the activation by checking for (*myenv*) at the beginning of our terminal lines. Now we can install packages with either **pip** or **conda**.

```
pip install package_name
```

```
conda install package_name
```

### 3.1 from a requirements.txt

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