

# Installing Software

Some tools don't require root privileges, and will let you customize your Python packages to your needs, without conflicting with any system-level Python installations, or Python installations other users have performed.

A Miniconda Python installation is a common prerequisite for Python-based applications in machine learning and other fields.

Miniconda is a free software package that includes the conda package and environment manager. <https://docs.conda.io/en/latest/miniconda.html>

1. Download the Miniconda installer

```
wget https://repo.anaconda.com/miniconda/Miniconda3-latest-Linux-x86_64.sh
```

2. Run the installer

```
$chmod 755 Miniconda3-latest-Linux-x86_64.sh
```

```
$/Miniconda3-latest-Linux-x86_64.sh
```

3. Configuring Conda

```
$/conda update conda
```

```
$/condaconfig --add channels bioconda
```

Miniconda installers contain the conda package manager and Python

```
$ conda install numpy
```

Creating environments with Conda

```
$ conda install bwa
```

Or a new environment can be created:

```
$ conda create -n aligners bwa bowtie hisatstar
```

Some tools came with singularity image. Please read more about how to use singularity container. You can use module to load singularity as:  
Module avail

```
module load singularity/2.5.1
```

<https://singularity.lbl.gov/quickstart>

<http://mskccchpc.org/display/CLUS/Singularity+Usage>

If you would like to request help installing the software, please use this form here: <http://hpc.mskcc.org/software-installation-request/>