

MOLE installation on MacOS

STEP 1: Download Eigen (<https://gitlab.com/libeigen/eigen/-/archive/3.4.0/eigen-3.4.0.tar.gz>)

STEP 2: Download Armadillo (<http://sourceforge.net/projects/arma/files/armadillo-10.7.0.tar.xz>)

STEP 3: Extract Eigen and Armadillo, you can use the following command for each compressed file: `tar xvf name_of_the_file_including_extension --directory target_directory`

STEP 4: Download MOLE (<https://github.com/jcorbino/mole/archive/refs/heads/master.zip>)

STEP 5: Extract MOLE: `unzip mole-master.zip -d target_directory`

STEP 6: Enter MOLE's directory (`cd mole-master`) and edit the following files:

`mole_C++/utils.cpp` (line 4) to be simply `#include <Eigen/SparseLU>`

`mole_C++/Makefile` (line 18) should be `CXXFLAGS = -O3 -std=c++11`

`examples_C++/Makefile` (line 19) should be `CXXFLAGS = -O3 -std=c++11`

and from line 25 of the same `Makefile` remove `-larmadillo`

Last but not least, edit the `Makefile` that is in `mole-master` (root of the directory) by setting the correct `PATH` to each dependency (Eigen and Armadillo), that is:

Line 2 of that `Makefile` should be something like: `ARMA = ../../armadillo-10.7.0` and line 7 should look like: `EIGEN = ../../eigen-3.4.0`

At this point you should be able to build the library and the examples by simply executing "make" from the top of the directory.

IMPORTANT: In order to build ANY of the packages above, the operating system needs to have `g++` (GNU Compiler) and `make` (utility that invokes `g++`) installed. Those two packages will get installed when you install Xcode on your Mac: `xcode-select --install`