**Download the Source**

The source code can be checked out from [GitHub](https://github.com/PyMesh/PyMesh):

git clone https://github.com/PyMesh/PyMesh.git

cd PyMesh

git submodule update --init

export PYMESH\_PATH=`pwd`

The rest of this document assumes PyMesh is located at $PYMESH\_PATH.

## Dependencies

### **System dependencies**

Uninstall Python2 version: sudo apt-get purge python

Then install the following packages:

sudo apt-get install \

libeigen3-dev \

libgmp-dev \

libgmpxx4ldbl \

libmpfr-dev \

libboost-dev \

libboost-thread-dev \

libtbb-dev \

python3-dev \

python3-setuptools \

python3-numpy \

python3-scipy \

python3-nose \

python3-pip \

cmake

### **Third party dependencies**

All third party libraries are attached to the repo as submodules. They are automatically built as part of PyMesh.

## Build PyMesh (with CMake)

First compile and install all of the third party dependencies:

cd $PYMESH\_PATH/third\_party

mkdir build

cd build

cmake ..

make

make install

Third party dependencies will be installed in $PYMESH\_PATH/python/pymesh/third\_party directory.

Then setup building environment:

cd $PYMESH\_PATH

mkdir build

cd build

cmake ..

PyMesh consists of several modules. To build all modules and their corresponding unit tests do:

make

make tests

PyMesh libraries are all located in $PYMESH\_PATH/python/pymesh/lib directory.

**Install PyMesh**

Install PyMesh in your system:

python3 setup.py install # Requires root privileges

**Verify installation**

Check PyMesh installation:

python3 -c "import pymesh; pymesh.test()"

Make sure all unit tests are passed, and report any unit test failures.