

How to install SimNIBS 2.0.0 manually on a Mac

Not often tested up to now ... tried on OSX 10.10.2 Yosemite

0) Before you start with the installation procedure

Go to “Settings-> Security&Privacy” and select “Anywhere” for “Allow apps downloaded from”

1) Install FSL

Follow the instructions on

<http://fsl.fmrib.ox.ac.uk/fsl/fslwiki/FslInstallation/MacOsX>

2) Install FreeSurfer

Follow the instructions on

<http://freesurfer.net/fswiki/DownloadAndInstall>

make sure that you [registered](#) the installation, and that you set the path in the .bash_profile (or .profile)

3) Install brew

Follow the instructions on <http://brew.sh/>

4) Install python and some python packages

Open a terminal and execute the following commands one line at a time

and read the outputs! If you read some warnings about “keg-only” that’s fine, it just means that brew won’t “hide” your system’s stuff behind the stuff it installed itself so it doesn’t cause problems... brewed stuff will still use it.

```
# set up some taps and update brew
brew tap homebrew/science # not sure that this is needed
brew tap homebrew/python # numpy, scipy, matplotlib, ...
brew update && brew upgrade
brew install python # install a brewed python (note: this should also includee
pip)
```

check the installation:

```
which python # should say /usr/local/bin/python
echo $PATH # /usr/local/bin should appear in front of /usr/bin
```

install python packages:

```
brew install numpy
brew install scipy
brew install Caskroom/cask/xquartz # needed for pygame
brew install pygame
brew install pyside # note: import PySide in python
pip install nibabel
pip install pyopengl # note: import OpenGL in python
```

adapted from <https://joernhees.de/blog/2014/02/25/scientific-python-on-mac-os-x-10-9-with-homebrew/>

5) Install simnibs into ~/simnibs2.0.0

Uncompress folder into ~/simnibs2.0.0, compile files and apply patches (needed for Mac OS X)

```
tar -C ~ -zxvf simnibs2.0.0.tar.gz
```

```
cd ~/simnibs2.0.0/fem_ffield
```

```
make
```

```
cd ~/simnibs2.0.0/fem_ffield/src_python # note: patch so that the brew python version is used
```

```
sed -i.bak '1s/.*#!/usr/local/bin/python2.7 -u/' simnibs_gui.py
```

```
sed -i.bak '1s/.*#!/usr/local/bin/python2.7 -u/' simnibs.py
```

```
cd ~/simnibs2.0.0/bin_osx # note: patch the pyside installation (needed on Yosemite)
```

```
python ./pyside_postinstall.py
```

6) Edit your .bash_profile

Don't have a ~/.bash_profile? No problem, create one. Otherwise skip this step:

```
cd
```

```
ls .bash_profile
```

If you get an error that the file could not be found do:

```
touch .bash_profile
```

open `.bash_profile` for editing:

```
cd
```

```
open ~/.bash_profile
```

add the following lines to the end of the file:

```
export SIMNIBSDIR=~/.simnibs2.0.0
```

```
source $SIMNIBSDIR/simnibs_conf.sh
```

save and close

For better and faster visualization of the meshes, we recommend using a predined configuration file for gmsh. In order to do so, type

```
cp ~/.simnibs2.0.0/gmsh-options_simnibsdefault ~/.gmsh-options
```

Now, close the terminal and open it again

A message should appear

```
setting up paths for SimNIBS 2.0.0
```

```
SIMNIBSDIR /usr/local/simnibs
```

And that's it!

You can check the installation by opening the GUI, type “`simnibs_gui`” in the terminal