

Trouble shooting for mexBBFMM2D

mexBBFMM2D has been tested on the following platform:

- OS X Yosemite (10.10.5) with MATLAB R2015b
- Windows 7 with MATLAB R2014b

Report any additional issues to yuel@stanford.edu if the error you've got is not covered in this trouble shooting guide.

Understanding your error messages

See [here](#) for a general guide for MEX troubleshooting. - Can you compile and run the `arraySize.c` example? If no check out if your compiler is supported by MATLAB, see question **How do I find the correct C/C++ compiler**. - Can you compile and run the `compilemex.m` ? If you have no trouble running `arraySize.c` but have trouble run `compilemex.m` shoot us an email

How do I find the correct C/C++ compiler?

See [here](#) for a list of supported C/C++ compiler for different MATLAB version. Type `mex.getCompilerConfigurations` to get details of your compilers.

Microsoft Windows SDK 7.1 is a free compiler supported by most MATLAB version and across platform. If you have trouble installing SDK 7.1, or have trouble running it on Windows see [here](#)

Errors related to SDK compiler

For Mac: If you get an error saying that SDK files are missing, e.g.,

```
Looking for folder '/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.9.sdk' ...No.
```

you can find the sdk files here <https://github.com/phracker/MacOSX-SDKs/releases>. Download those that are missing and place them in the appropriate directories based on the error message you get.

For PC: If you get an error related to 'ammintrin.h':

```
Building with 'Microsoft Windows SDK 7.1 (C++)'.
Error using mex
mexFMM2D.cpp
c:\Program Files (x86)\Microsoft Visual Studio 10.0\VC\INCLUDE\intrin.h(26) : fatal e
rror C1083: Cannot open
include file: 'ammintrin.h': No such file or directory

Error in make (line 38)
mex('-O','mexFMM2D.cpp',src1,src2,src3,'-largeArrayDims',['-I',eigenDIR],['-I',fmmDIR
'],'-output',filename)

Error in compilemex (line 5)
make(r,kernel,outputfile);
```

See [here](#) or copy `ammintrin.h` from elsewhere in your computer (usually you will have multiple versions of `ammintrih.h`) and put it in the directory shown up in the error message, e.g.,

```
c:\Program Files (x86)\Microsoft Visual Studio 10.0\VC\INCLUDE\
```

Error related to "mex -largeArrayDims"

mexBBFMM2D package use `mex -largeArrayDims`. `largeArrayDims` is a MEX flag that add after MATLAB version 7.3., see more details [here](#)