

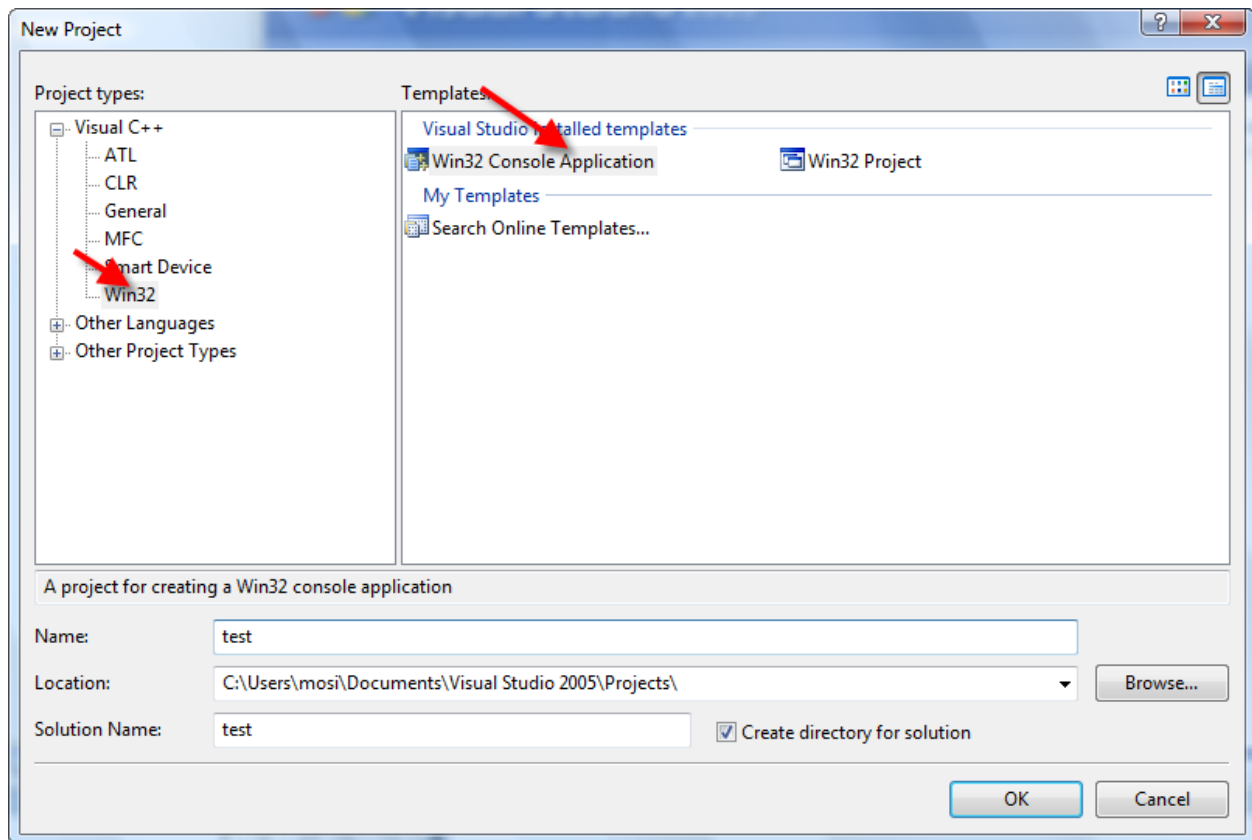
Compile & Debug MEX-file with Visual Studio 2005

Compile MEX-file

Matlab 7.1+ uses .mexX (X depends on platform) instead of DLL file for MEX-file. So compiled MEX file as DLL format must be recompiled. For windows visual studio can compile and Debug MEX-file as simple as possible.

for compile MEX-file with Visual Studio 2005 :

- 1) Create win32 DLL project.



- 2) find `mexversion.rc` from the MATLAB include directory,

`matlab\extern\include`, add it to project.

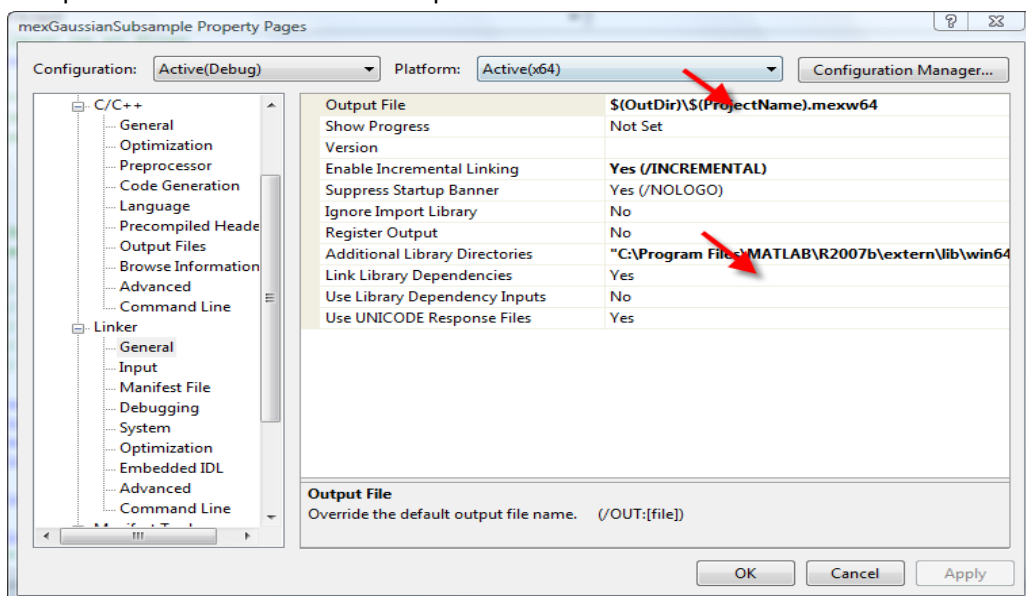
- 3) Create a .def file such as below for every .cpp file with the following text, and add it to the Solution.

```
LIBRARY mexGaussianSubsample
EXPORTS mexFunction
```

- 4) Under C/C++ in Properties of your project :
 - In Additional Include Directories, add matlab\extern\include.
 - In Preprocessor properties, add `MATLAB_MEX_FILE` as a preprocessor definition.
- 5) Under Linker in Properties of your project:
 - In General Output File, change to change to `.mexwX` that X :

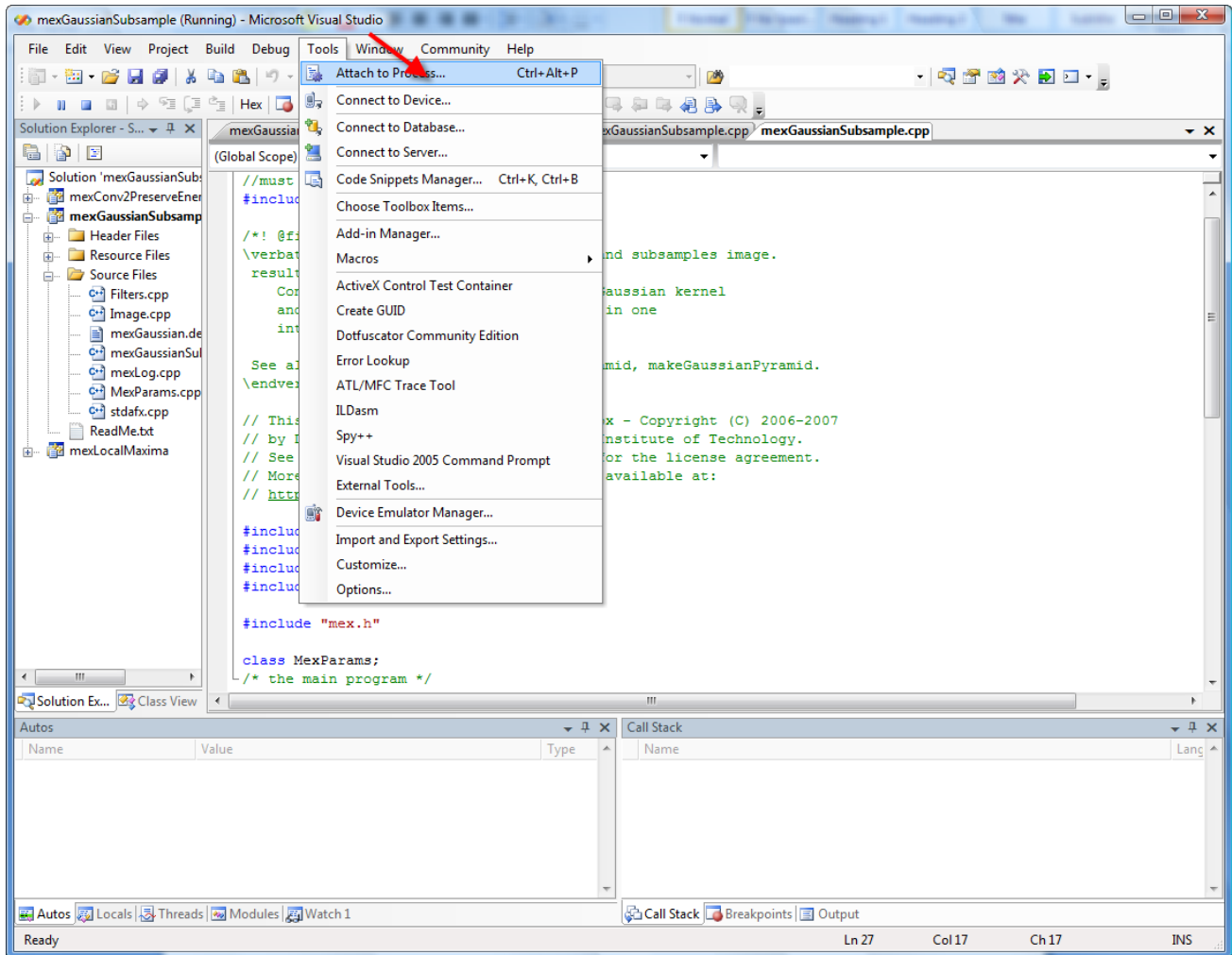
Windows XP/Vista 32-bit	.mexw32
Windows XP/Vista 64-bit	.mexw64

- 6) Under Linker Additional Library Directories, add matlab\extern\lib\win32\microsoft for 32-bit platform and matlab\extern\lib\win64\microsoft for 64-bit windows.
- 7) In Input Additional Dependencies, add `libmx.lib`, `libmex.lib`, and `libmat.lib` as additional dependencies.
- 8) Under Linker Input Module Definition File, add the `(.def)` file you created.
- 9) Add `Filter.h`, `Image.h`, `MexParams.h` and `Mexlog.h` to project.
- 10) In Additional Include Directories, add directory that contain file above.
- 11) For each `.cpp` file add `#include "stdafx.h"` at first.
- 12) Change your setting for compiling 32-bit or 64-bit or Debug or Release.
- 13) Compile code & use `.mexwX` in Output File.

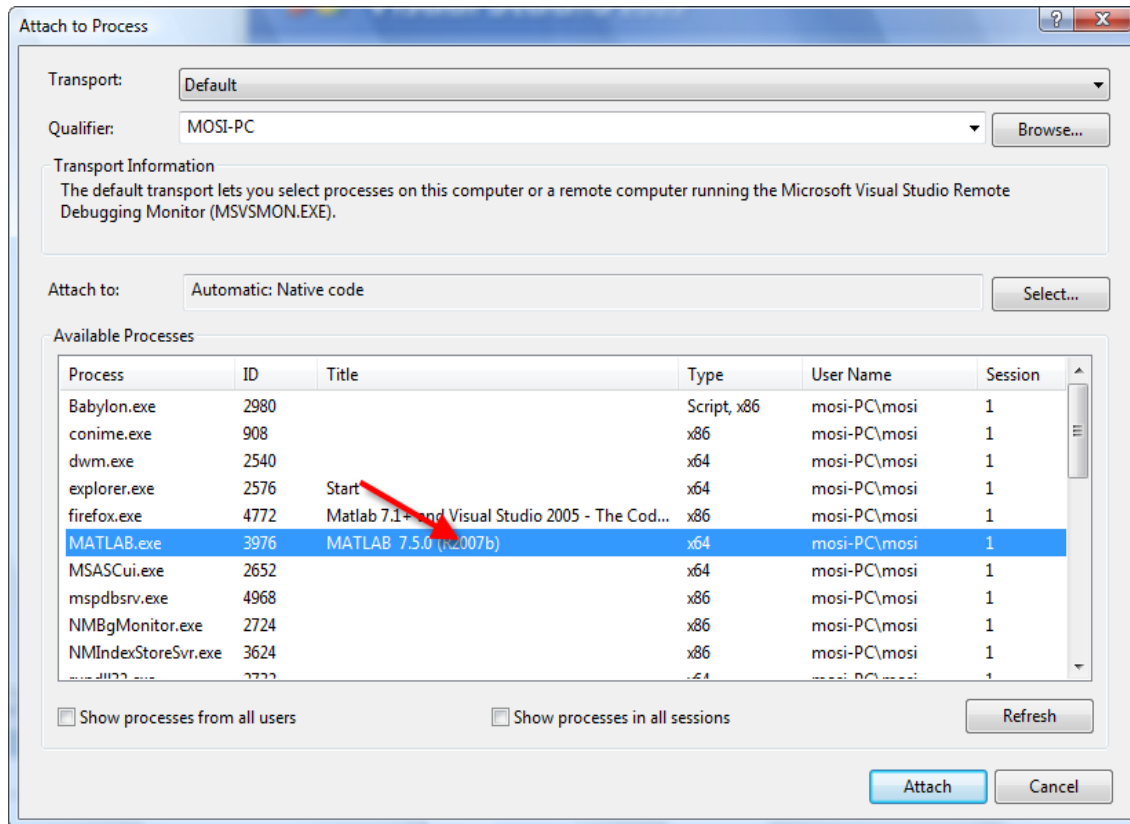


Debug MEX-file

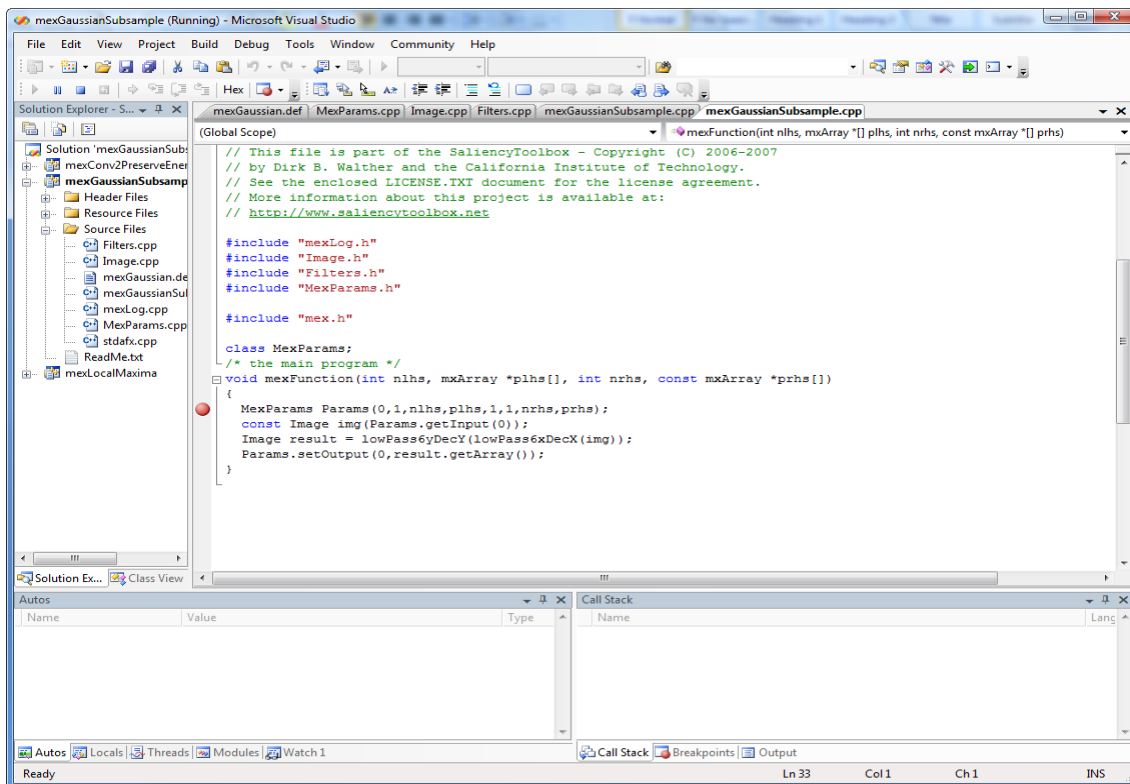
Make sure that compile code in Debug mode.



Select matlab process.



Open your desired C++ file such as mexLocalMaxima.cpp. set breakpoint.



Run guiSaliency and press start.debug your code.

Reference

<http://www.codeproject.com/useritems/MatlabVS.asp>

Matlab Tutorial