

# my octave cheat sheet

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## 1 Main octave links

1. [http://en.wikipedia.org/wiki/GNU\\_Octave](http://en.wikipedia.org/wiki/GNU_Octave)
2. <http://www.gnu.org/software/octave/>
3. <http://octave.sourceforge.net/index.html>

## 2 How to install octave?

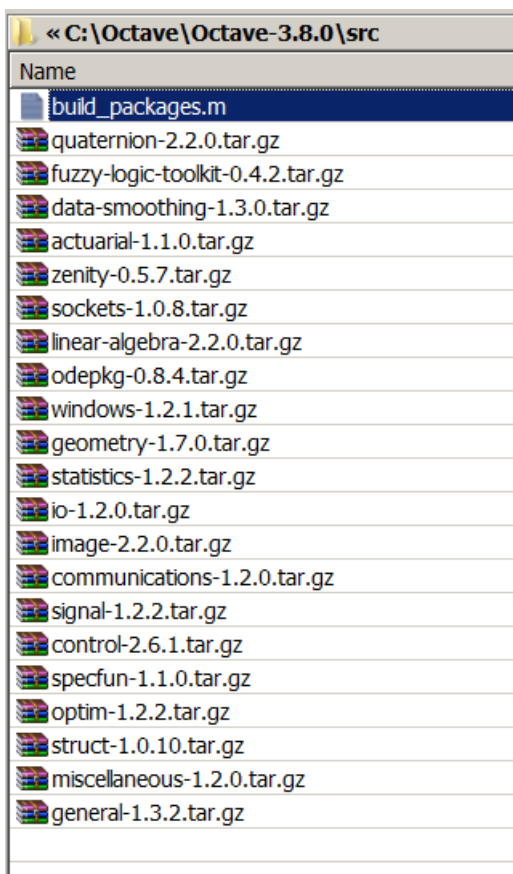
For windows, to install octave 3.8, I downloaded the installer from <http://octave.osuv.de/3.8/windows/>

```
>> ver
-----
GNU Octave Version 3.8.0
GNU Octave License: GNU General Public License
Operating System: MINGW32_NT-6.1 Windows 7 Service Pack 1 i686
```

For Linux, easy way is `apt-get install octave`  
might want to do `apt-get autoremove` before.

## 3 How to install additional packages?

On octave 3.8, I found an install file called `build_packages.m` in the folder `C:\Octave\Octave-3.8.0\src` which is where octave 3.8 was installed using the window installer mentioned above. Then from octave I simply run the above file. This installed all packages in the src folder



An example command is `pkg ('install', 'communications-1.2.0.tar.gz')`  
After the above was completed, here is the list

```

>> pkg list
Package Name          | Version | Installation directory
-----+-----+-----
    actuarial *      | 1.1.0   | ... \octave \packages \actuarial-1.1.0
    communications   | 1.2.0   | ... \octave \packages \communications-1.2.0
    control *        | 2.6.1   | ... \share \octave \packages \control-2.6.1
    data-smoothing    | 1.3.0   | ... \octave \packages \data-smoothing-1.3.0
    fuzzy-logic-toolkit | 0.4.2   | ... \packages \fuzzy-logic-toolkit-0.4.2
    general           | 1.3.2   | ... \share \octave \packages \general-1.3.2
    geometry          | 1.7.0   | ... \share \octave \packages \geometry-1.7.0
    image             | 2.2.0   | ... \share \octave \packages \image-2.2.0
    io                | 1.2.0   | ... \share \octave \packages \io-1.2.0
    linear-algebra     | 2.2.0   | ... \octave \packages \linear-algebra-2.2.0
    miscellaneous     | 1.2.0   | ... \octave \packages \miscellaneous-1.2.0
    odepkg            | 0.8.4   | ... \share \octave \packages \odepkg-0.8.4
    optim             | 1.2.2   | ... \share \octave \packages \optim-1.2.2
    quaternion *      | 2.2.0   | ... \octave \packages \quaternion-2.2.0
    signal            | 1.2.2   | ... \share \octave \packages \signal-1.2.2
    sockets           | 1.0.8   | ... \share \octave \packages \sockets-1.0.8
    specfun           | 1.1.0   | ... \share \octave \packages \specfun-1.1.0
    struct            | 1.0.10  | ... \share \octave \packages \struct-1.0.10
    windows           | 1.2.1   | ... \share \octave \packages \windows-1.2.1
    zenity            | 0.5.7   | ... \share \octave \packages \zenity-0.5.7
>>

```

Before I used to do this:

go to <http://octave.sourceforge.net/index.html> find a package you need then type  
`pkg install package_file_name.tar.gz` from inside octave

see also this link

<http://www.gnu.org/software/octave/doc/interpreter/Installing-and-Removing-Packages.html>

## 4 How to find what packages are installed?

use `pkg list`