is a percentage while Matlab assumes it is the number of samples. The Web has good sites comparing the two softwares, such as [urlomoc].

## **B.4.1 Octave Installation**

The primary source for Octave is [urlooct]. But, for better organization, most of Octave's packages (called toolboxes in Matlab's jargon) are kept separated, at Octave Forge: [urloofo]. Therefore, after installing Octave itself, it may be necessary to download and install its packages (toolboxes).

After installing Octave, from its prompt, the command ver can be used to verify not only the Octave version but also its toolboxes. For example, the toolbox signal is required to execute several of the companion scripts. When using Linux, it is possible to use a command such as [urloins]:

```
sudo apt-get install $( apt-cache search octave-forge | awk '{printf
$1; printf " "}' )
```

to install the packages.

An alternative to this two-steps installation procedure is to obtain a complete "distribution" of Octave, with all (or most) packages of interest already incorporated. For example, installing Octave on Windows can be simplified by following the guidelines at [urlowin], which indicate how to install the Octave executable from a single file and then most of its packages from a second compressed file.

It is suggested to add the folder with the companion functions in your Octave PATH using addpath. For example, to add the folder

```
C:\Code\MatlabOctaveFunctions
```

in a Windows machine, avoid the backslash using

```
addpath("C:/Code/MatlabOctaveFunctions", "-end")
```

or

```
addpath(["C:" filesep "Code" filesep "MatlabOctaveFunctions"], "-end")
```

and use savepath to save the modifications.

Make sure the command sound (or soundsc) is working. You may need to install a sound player and inform Octave of its PATH using an Octave's global environment variable called sound\_play\_utility. A good strategy is to setup this variable at the .octaverc file with something like global sound\_play\_utility = "c:/Program Files/Vide-oLan/VLC/vlc", but changing the PATH to your installed audio player [url1rec].

Then keep your Octave installation up to date. For installing a package, for example, from the Octave prompt it is possible to run pkg install -forge signal to install the signal package.

Another point worth mentioning is that some packages, such as the Fixed Point, are not part of the ones supported by Octave Forge and need to be installed individually (taking in account their compatibility with the installed version of Octave).