

Part Five:

Introduction to MATLAB

MATLAB is system that originally was designed to illustrate common linear algebra operations. As linear algebra is so useful, the original program has grown into a vast scientific software system. Visit <http://www.mathworks.com> to get an idea about the commercial success of MATLAB. MATLAB is the computing standard in almost all engineering disciplines.

The titles of the nine lectures are

1. Introduction to MATLAB
2. Plotting with MATLAB
3. Polynomials and fitting
4. Programming in MATLAB
5. MATLAB as drawing tool
6. Movies in MATLAB
7. Signal processing in MATLAB
8. Special matrices
9. Selected Applications

GNU Octave (available via <http://www.octave.org/>) is freely distributed. Its language is mostly compatible with MATLAB. Since in this introduction we can only touch the basics of MATLAB, most common operations we will see are expected to work as well with GNU Octave. While Octave is included with the Debian GNU/Linux and SuSE Linux distributions, the Windows version is easy to install.