The Learning Resource Center

The ECE Learning Resource Center (LRC) contains five instructional clusters of computers. The clusters are generally open from 8:00am to 11:00 pm. The clusters are accessible by key card after hours. To activate your account, present your UT identification card to the proctor in any of the LRC clusters. The LRC rooms and hours are described at http://www.ece.utexas.edu/undergrad/labs.html.

1   Available Hardware

The LRC clusters have Sun terminals, Linux workstations, PCs and Macintosh computers, The Sun Solaris workstations available for remote connection are sunfire1, sunfire2, sunapp1 and sunapp2.

2   Available Software

LabVIEW is graphical programming environment for simulation, code generation, test and measurement. In the LRC clusters, LabVIEW is only available under Windows.

Matlab is a number crunching tool for matrix-vector calculations which is well-suited for algorithm development and testing. It comes with a signal processing toolbox (FFTs, filter design, etc.), image processing toolbox, and a symbolic toolbox (for symbolic math calculations). Matlab is available under Windows, Linux and Sun operating systems. On the Sun workstations, Matlab is only available on sunapp1 and sunapp2.

On Windows and Unix machines, ImageMagick is freely distributable software to manipulate image formats:

- animate – display a sequence of images
- composite – combines images to create new images
- convert – converts between image and video formats
- display – display an image
- import – capture some or all of an X server screen and save the image to a file.
- mogrify - transform an image or sequence of images
- montage – creates a composite image by combining several separate images

For those using the Sun workstations in the LRC, you will be provided with default login files .cshrc and .login. Feel free to copy the login files .cshrc, .mycshrc, and .mylogin from my account `bevans`. If you copy my login files, then be sure to remove your .login file or rename it.

Mathematica is a symbolic math environment that is available on sunfire1 and sunfire2. The **math** command runs the command-line interface to Mathematica, whereas the **mathematica** command runs the GUI for Mathematica.

Under X windows, the **xv** program is useful for compressing, resizing, cropping, and rotating images, and for converting images to various formats.

The GNU C compiler **gcc** and GNU C++ compiler **g++** are available.