The Learning Resource Center

The ECE Learning Resource Center (LRC) for instructional computing is located in the second-floor ENS lab rooms as well as ENS 507. The ECE LRC rooms are open Mondays–Fridays from 8:00 AM to 10:00 PM, and on Saturday and Sunday from 11:00 AM to 10:00 PM. 24-hour access is available Mondays–Thursdays in ENS 507 with a valid UT Austin ID card. To activate your ECE LRC accounts, present your UT identification card to an ECE LRC proctor. The LRCs are described at http://www.ece.utexas.edu/it/labs.

1   Available Hardware

The ECE LRC has about 200 workstations, including Unix workstations and Windows machines. Several Linux workstations are available for remote connection: browser, daisy, luigi, mario, peach, thwomp and yoshi. The following Sun Unix workstation is available for remote connection: sunfire1. All are in the domain ece.utexas.edu. For more information, see http://www.ece.utexas.edu/it/remote-linux.

2   Available Software on the Unix Workstations

The following programs are installed on all of the ECE LRC machines unless otherwise noted. On the Unix machines, they are installed in the /usr/local/bin directory.

• **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.). It is run by typing **matlab**. Matlab is licensed to run on the Windows PCs in the ECE LRC, as well as Unix machines luigi, mario and princess in the ECE LRC. On the Unix machines, be sure to type `module load matlab` before running Matlab. For more information about using Matlab, please see Appendix D in this reader.

• **Mathematica** is a environment for solving algebraic equations, solving differential and difference equations in closed-form, performing indefinite integration, and computing Laplace, Fourier, and other transforms. The command-line interface is run by typing **math**. The graphical user interface is run by typing **mathematica**. On ECE LRC machines, Mathematica is only licensed to run on sunfire1.

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

• LabVIEW software environment, which is a graphical programming environment that is useful for signal processing and communication systems developed at National Instruments, is also installed. LabVIEW's Mathscript facility can execute many Matlab scripts and functions. We have a site license for LabVIEW that allows faculty, staff and students to install LabVIEW on their personally-owned computers. For more information, see

http://users.ece.utexas.edu/~bevans/courses/realtime/homework/index.html#labview

Placeholder - please ignore.