The Learning Resource Center

The Learning Resource Center (LRC) in ENS 507 is an 80-seat general-purpose Unix and Macintosh laboratory. ENS 507 is open 24 hours per day, 7 days per week. To activate your account, present your UT identification card to the proctor in ENS 507. The LRCs are described at http://www.ece.utexas.edu/lrc/.

1 Available Hardware

ENS 507 has 80 workstations, including Unix workstations and Windows NT machines. The following Unix machines are available for remote connection: sunapp1, sunapp2, sunapp3, sunfire1 and sunfire2. All are in the ece.utexas.edu domain.

2 Available Software on the Unix Workstations

When you get an LRC Unix account, you will probably be assigned the Korn shell. Configuring a Unix account with the right login scripts can take days. As an alternative, you are welcome to copy my setup. First, backup your current login files by renaming .cshrc to .cshrc˜ and .login to .login˜ using the Unix mv command. Second, copy the following files from my home directory (˜bevans) to your home directory: .cshrc, .mycshrc, and .mylogin. Third, you will need to change shells to the C shell (as in a shell language with syntax similar to C) by using the Unix command chsh. For more information about Unix, see http://www.ece.utexas.edu/˜bevans/talks/software_development/.

The following program is only installed on the Unix machines sunapp1, sunapp2, and sunapp3 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**.

The following programs are installed on all Unix machines:

• **Netscape** browses the World Wide Web, reads news, and manages e-mail: the **netscape** commands brings up version 4.0.

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

The following programs are only installed on all sunfire1 and sunfire2:

• **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**. Mathematica is only licensed to run on sunfire1.

• The **exmh** utility is a graphical user interface for e-mail. It is written in the Tcl/Tk scripting language.

• The Ptolemy software environment, which is a graphical programming environment for signal processing and communication systems developed at UC Berkeley, is also installed: type **pigi** to run it.