

The Learning Resource Center

The Learning Resource Center (LRC) in ENS 507 is an 80-seat general-purpose Unix and Windows 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: 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 programs are installed on all Unix machines 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**.
- **Mathematica** is an 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.
- **Netscape** browses the World Wide Web, reads news, and manages e-mail: the **netscape** commands brings up version 4.0.
- The **exmh** utility is a graphical user interface for e-mail. It is written in the Tcl/Tk scripting language, and relies on the mh mail handling utilities.
- The GNU C compiler **gcc** and GNU C++ compiler **g++** are available.
- 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.