Getting Started

Before you can begin working, you’ll need to get access to class resources and configure a few things. This should be simple; we’ve done (or will do) most of the hard work for you. Please complete these steps absolutely as soon as possible. Remember that you only have a week to do the first project!

1 Get a CSAIL account

If you already have a CSAIL account (from a UROP or previous course) then you may skip this step.

You’ll need to sign up for a CSAIL account before you can do anything else. You will need to choose the “Computer Architecture” group, and then “Saman Amarasinghe” as your sponsor. The account creation URL is

https://inquir.csail.mit.edu/cgi-bin/welcome.cgi

It will probably take a few hours before you can log in (since Professor Amarasinghe will need to approve your account creation request).

2 Available course machines

You will be able to directly connect to the cagfarm-NN.csail.mit.edu machines to work on and run code. If you have a C development environment set up, then you will probably also be able to do most of the work locally. However, these machines have working compilers as well as installations of VTune and the PNQ client.

Many of the older cagfarm machines have been removed from service (although all of them are older 32-bit machines). The numbering therefore begins at around 27 (that is, cagfarm-27) and goes to about 49. Nobody else is using these machines right now, but please be considerate in your use of them.

3 Connecting to course machines

In order to connect to course machines, you will need to use SSH. If you’re on a Mac OS X or Linux machine, this is as simple as opening a terminal and typing

ssh user@hostname

This is exactly the same as the way you remotely connect to Athena. If you’re using Windows, however, you’ll need to install some software. The free, open-source, and widely-used PuTTY is a good choice.

4 Running the setup script

Your account will need to be configured so that you can use VTune and PNQ. We’ve written a script that will perform the necessary magic incantations. SSH into any CSAIL machine (such as one of the cagfarms) and run the following command.

/afs/csail.mit.edu/proj/courses/6.172/scripts/student-setup

You will have to log out and log back in for some changes to take effect. After that, everything should work except for PNQ; if you try to submit jobs, you’ll get error messages. Give us a few hours to get things set up on our end (the setup script will send us an email with the information we need), and you should be off and running.