

CSCI 363, Spring 2023

Running Matlab remotely

Here are some instructions for running Matlab remotely. You should download the applications and try to get this to work *before* class on Wednesday, February 10.

First, you will need to download a VPN (Virtual Private Network) to your desktop. Some of you may have already done this for other courses.

Here is the ITS help page for obtaining a VPN. There are some helpful docs and videos to watch.
<https://www.holycross.edu/its-help-desk/it-services/accounts-network-access/vpn-access>

Once you get the VPN installed (mine is called Global Protect), you will need to download a free app called "Microsoft Remote Desktop" from the Windows or MacOS app store. This app will allow you to connect directly to a server on campus from which you can run Matlab.

To run Matlab:

First log on with your VPN. Then open the app Microsoft Remote Desktop. Click on "PCs" and add "remotedesk03" in the space for PC name. Then click on "Add". A window should pop open where you can enter your HC username and password. Once you do this (you may have to accept a security certificate), you should see a PC style desktop with a MATLAB R2018a icon in the middle on the left-hand side of the screen. Click on the icon and you're off and running.

Alternative to remotedesk03: If remotedesk03 is slow, you can add "remotedesk01" which also has Matlab. I had to login by typing "HOLYCROSS\" before my username.

Running Matlab remotely on radius:

First, obtain an X-Windows client for your computer:

- [MobaXterm](#) for Windows - This is one of many *X11 servers* for Windows. MobaXterm also comes with an SSH client (for logging in without a graphical interface) and an SCP client (for copying files back and forth from your radius home directory to your laptop).
- Mac users can use the [X11.app / quartz](#) app instead, depending on your operating system version. There are likely other programs available as well. Try searching for "Mac X11 Server". After running the X11 app, log in to radius by typing this into a terminal window:

```
ssh -Y username@radius.holycross.edu
```

(use your login name instead "username", obviously).

Once logged into radius, you can run matlab by typing at the prompt:

```
/srv/mathcs/MATLAB/R2020b/bin/matlab &
```

(Note: If you know how to create an alias, that can be helpful so you don't have to type the whole path).

Alternative: Buying Student Version of Matlab

There is a student version of Matlab that you can buy that will probably work for the things we will do in this class if you add the Image Processing Toolbox.

- The Matlab and Simulink Student Suite costs \$99.00 and probably includes all the toolboxes you will need.
- The Student version of Matlab costs \$49.00 and you can add the Image Processing Toolbox for an additional \$10.00

I do not guarantee these will work for everything we will be doing in class, and I will not be testing the assignments on this platform. You buy them at your own risk.