

# How to Set up the C/C++ Programming Environment - ECE471/571 Pattern Recognition

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This manual briefly introduces the various ways you can use to set up the C/C++ programming environment, for both Linux and Windows users and for both remote or local access.

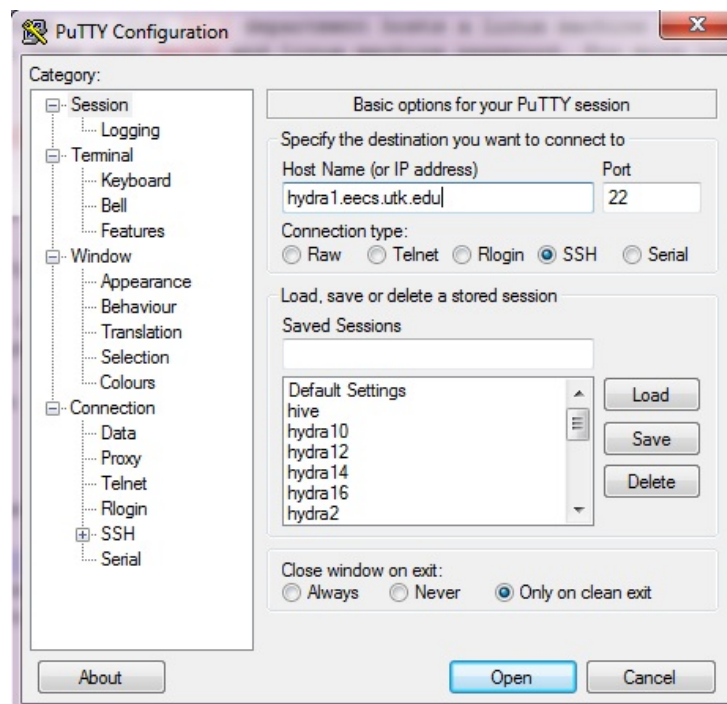
## 1 For Linux Users

The EECS department hosts a Linux machine computer lab **Hydra** which is located at MK421. You can stop by anytime when the lab is open. To log in the computers, you need your NetID and Linux machine password. For more information, please contact IT staff at [ithelp@eecs.utk.edu](mailto:ithelp@eecs.utk.edu) or visit MK423 to get more help.

If you want to remotely log in to the computer, you can use the PuTTY Shell and make a connection to Hydra. PuTTY is a free software that implements the SSH. You can download a free version at

<http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>

To make a new connection, install and open the software, type in `hydra1.eecs.utk.edu` as Host Name, select `Port22`. The Connection type should be `SSH`. Click the “open” button to open the terminal and log in with your account.



There are more than 25 computers in the Hydra lab, you can choose any one you want by specifying the number follows the hydra in Host Name. For example, you want to log in the hydra machine No.10, the Host Name should be `hydra10.eecs.utk.edu`.

If you use the Mac machine and you need to remotely log in to the hydra machines, simply open a terminal and type in

```
sshhydra1@eecs.utk.edu
```

Finish the login process by providing your account information.

## 2 For Windows Users

If you prefer to use the Windows system, you can download and install the free software **Dev-C++** provided by Bloodshed Software into your computer and set up the programming environment on your own computer. To download Dev-C++, go to

```
http://www.bloodshed.net/dev/devcpp.html
```

Select the version you need and install it on your computer.

You can also use the Windows computer lab **Tesla** located at MK418. All computers there are installed with the Microsoft Visual Studio 2012.

## 3 Useful Links

Following is a list of useful links for you to start with C/C++ programming.

1. How to write Makefile

```
http://mrbook.org/tutorials/make/
```

2. How to program with C++. An brief C++ tutorial

```
http://www.cplusplus.com/doc/tutorial/
```

3. Introductions to Linux Commands

```
http://coding.smashingmagazine.com/2012/01/23/introduction-to-linux-commands/
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