

Machine Learning for Engineering Applications
Homework #0
Fall 2023

Due: **August 25, 2023, submission to CANVAS before 11:59 PM**

JUST GET IT DONE!!!!

- If **you have** a LEAP cluster account
 - Test that you have access to your account.
 - Make sure that the VPN access to the school network works
 - If one or both do not work, contact the Admin: <https://doit.txstate.edu/rc/contact.html>
 - If **you do not have** a LEAP cluster account
 - Request one: <https://doit.txstate.edu/rc/contact.html>
 - You will receive an email from the admin with instructions
 - You should receive access to the VPN with instructions as well
 - Once you have an account and access:
 - Follow the “**you have**” above steps
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- **VPN**
 - If you are connected to the campus network → you do not need to VPN
 - If you are outside of the campus network → you will need to VPN
 - VPN support → <https://itac.txstate.edu/support/vpn>
 - VPN connection link (*bookmark it*) → <https://remoteaccess.txstate.edu/>
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- **Mac Users**
 - Make sure to find and use the Mac Terminal
 - This will be your terminal SSH connection to the LEAP cluster
 - Type the command: `ssh -X netid@leap.txstate.edu`
 - Type your NetID password → **The cursor will NOT move as you type**
 - When successful, you should see this on your terminal screen:

```
Texas State University

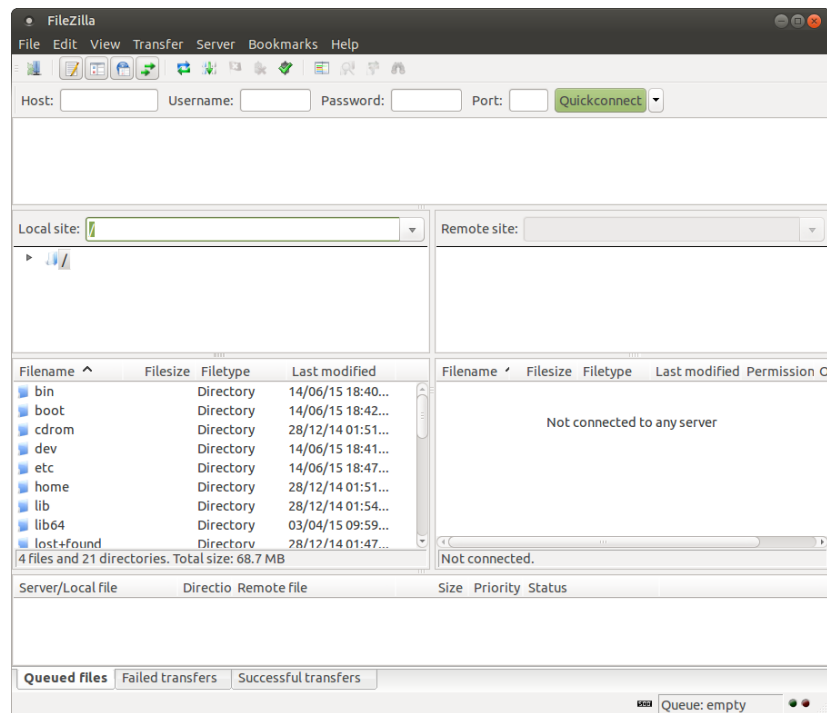
Use of Computer and network facilities requires prior
authorization. Unauthorized access is prohibited.
Usage may be subject to security testing and monitoring.
Abuse is subject to criminal prosecution. Use of these
facilities implies agreement to comply with the policies
of Texas State University.

Password:
Last login: Tue Aug  3 18:54:51 2021 from 10.102.53.246
Rocks 7.0 (Manzanita)
Profile built 10:33 15-Aug-2020

Kickstarted 10:39 15-Aug-2020
(base) [c...@login1 ~]$
```

(You should see something similar...not identical)

- To finish, type the command: `exit`
 - You go back to the terminal environment on your machine
 - You can type `exit` again and it will close the terminal
- Download Filezilla: <https://filezilla-project.org/download.php?platform=osx>
 - Run the install-file, move the Filezilla file to your Application folder, and then open Filezilla

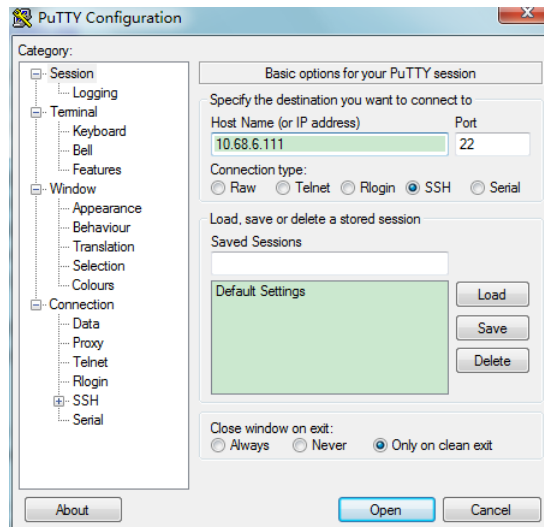


(You should see something similar...not identical)

- Host name: `leap.txstate.edu`
 - Username: *your NetID*
 - Password: Type your NetID password
 - Port number: 22 (*always*)
 - Click “Quickconnect”
- The left window → Your files on your machine
 - The right window → Your files on your LEAP account (pretty empty)
 - Find the **Disconnect** button, the **disconnect** option from the menus, or **just close the window** to disconnect from the LEAP cluster.

• Windows Users

- Download PuTTY: <https://the.earth.li/~sgtatham/putty/latest/w64/putty.exe>
 - This will be your terminal SSH connection to the LEAP cluster
 - Run the EXE-file and you should see something like:



(You should see something similar...not identical)

- Host name: `leap.txstate.edu`
- Port number: 22 (*always*)
- SSH option should be selected by default
- Save it! → That way you do not have to type all this each time and give it a useful name like “LEAP” on “Saved Session” field and click “Save”
- Click “Open”
- Username: *your NetID*
- Password: Type your NetID password → **cursor does NOT move while you type**
- When successful, you should see this on your terminal screen:

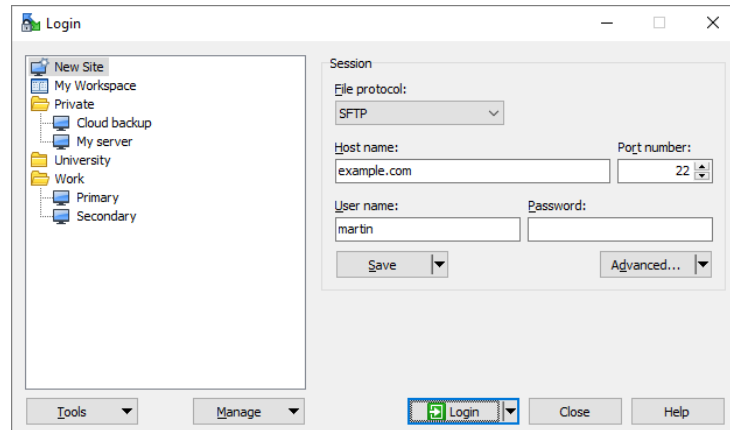
```
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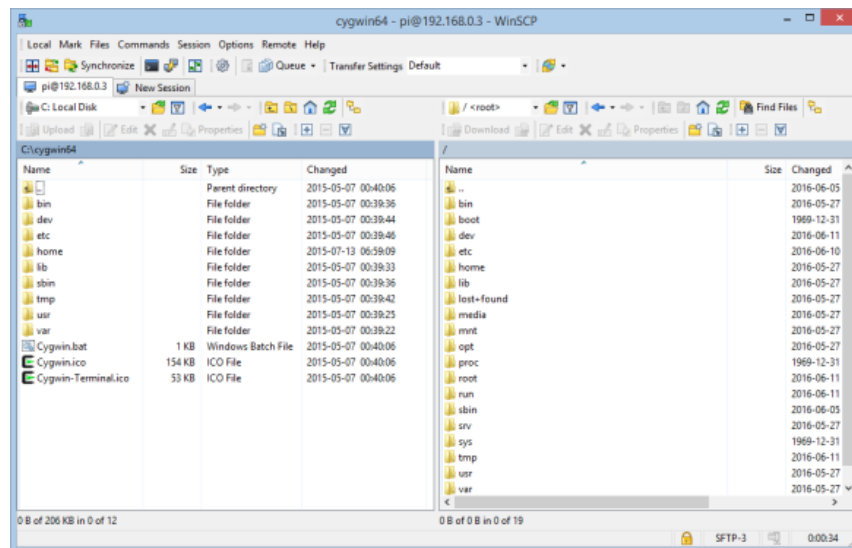
(You should see something similar...not identical)

- To finish, type the command: `exit`
- PuTTY should close your connection to the LEAP cluster
- Download WinSCP: <https://winscp.net/eng/download.php>
 - This will be your file transfer application to the LEAP cluster
 - Run the EXE-file, install, run, and you should see something like:



(You should see something similar...not identical)

- File Protocol: SFTP (*always*)
 - Hostname: leap.txstate.edu
 - Port number: 22 (*always*)
 - Username: *your NetID*
 - Password: Type your NetID password
 - Save it! → That way you do not have to type all this each time and give it a useful name like “LEAP”
 - Click Login!
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- When successful you should see both sides populated with files and/or folders:



(You should see something similar...not identical)

- The left window → Your files on your machine
- The right window → Your files on your LEAP account (pretty empty)
- Find the **Disconnect** button, the disconnect option from the menus, or just close the window to disconnect from the LEAP cluster.

What to submit:

- **Connect from home**
 - Take a screenshot of your F5 connectivity window showing the green light
 - Take a screenshot of the LEAP terminal once you have successfully connected with your account
- **Create a zip file** with both screenshots and submit it by the deadline