Welcome to CMPT 127 Computing Laboratory
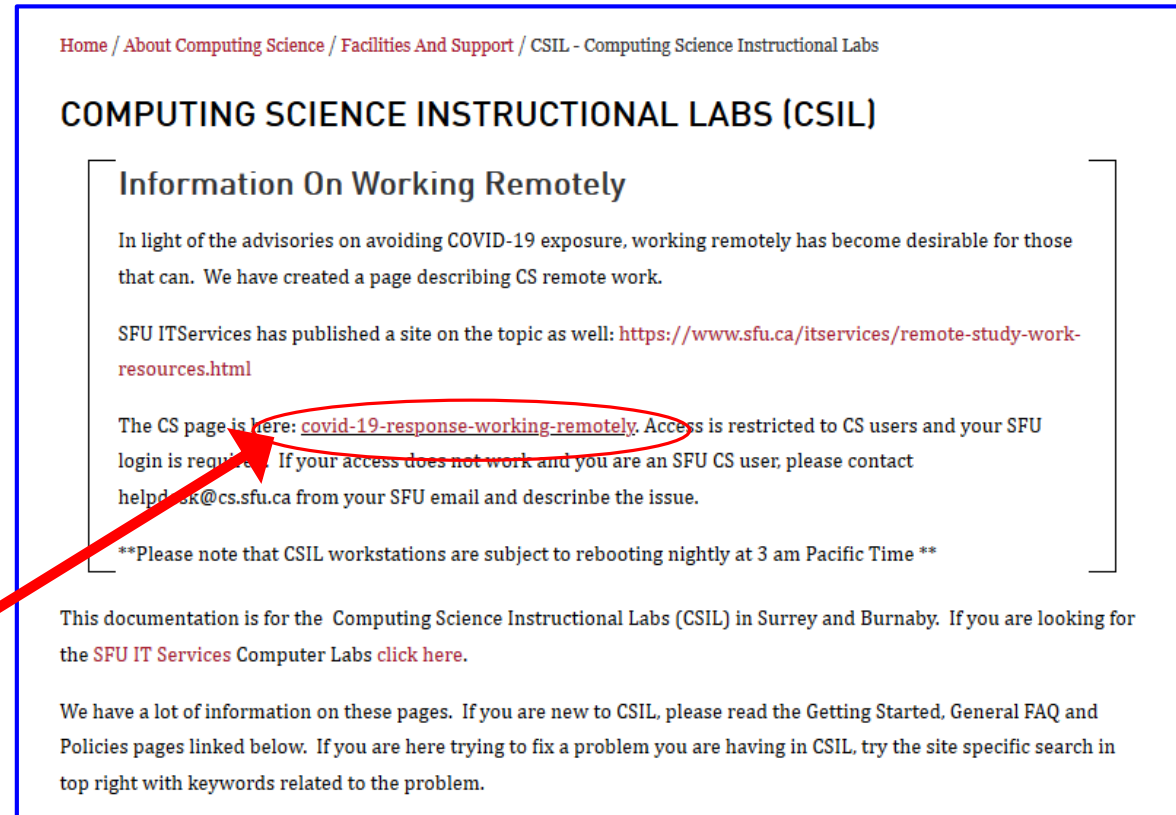
My name is Anne Lavergne

The following set of slides covers the topics

✓ Remote login to CSIL

✓ Downloading MobaXTerm or XQuartz

- Click on the option <u>Remote Login to CSIL</u> on the menu to the left of our course web site

- This is what the top section of the web page looks like:

- Become familiar with the content of this whole web page by reading what it says

- Then click on this link

Home / About Computing Science / Facilities And Support / CSIL - Computing Science Instructional Labs

COMPUTING SCIENCE INSTRUCTIONAL LABS (CSIL)

Information On Working Remotely

In light of the advisories on avoiding COVID-19 exposure, working remotely has become desirable for those that can. We have created a page describing CS remote work.

SFU ITServices has published a site on the topic as well: https://www.sfu.ca/itservices/remote-study-work-resources.html

The CS page is here: covid-19-response-working-remotely. Access is restricted to CS users and your SFU login is required. If your access does not work and you are an SFU CS user, please contact helpdesk@cs.sfu.ca from your SFU email and descrinbe the issue.
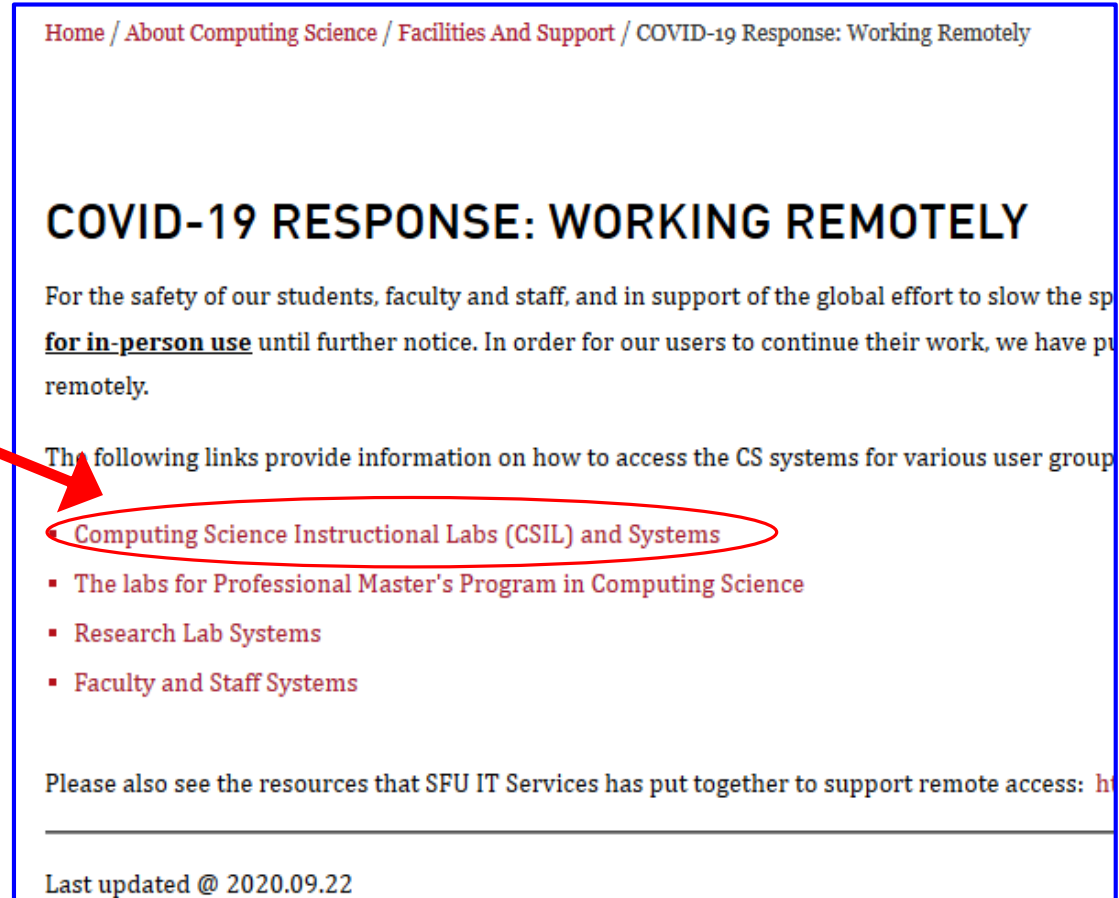
**Please note that CSIL workstations are subject to rebooting nightly at 3 am Pacific Time **

This documentation is for the Computing Science Instructional Labs (CSIL) in Surrey and Burnaby. If you are looking for the SFU IT Services Computer Labs click here.

We have a lot of information on these pages. If you are new to CSIL, please read the Getting Started, General FAQ and Policies pages linked below. If you are here trying to fix a problem you are having in CSIL, try the site specific search in top right with keywords related to the problem.

➡ This is what the web page looks like:

➡ Again, become familiar with the content of this whole web page by reading what it says

➡ Then click on this link

Home / About Computing Science / Facilities And Support / COVID-19 Response: Working Remotely

COVID-19 RESPONSE: WORKING REMOTELY

For the safety of our students, faculty and staff, and in support of the global effort to slow the sp **for in-person use** until further notice. In order for our users to continue their work, we have p remotely.

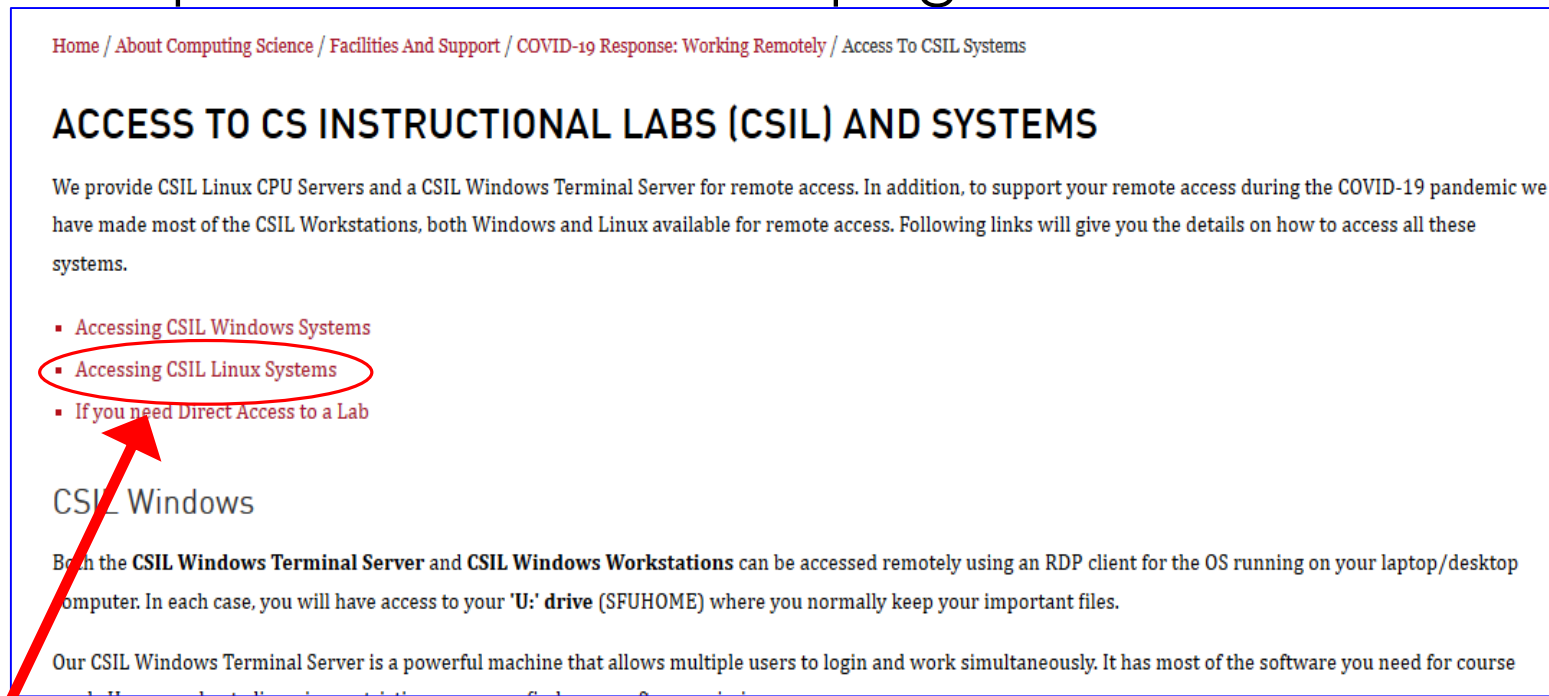The following links provide information on how to access the CS systems for various user group

- Computing Science Instructional Labs (CSIL) and Systems
- The labs for Professional Master's Program in Computing Science
- Research Lab Systems
- Faculty and Staff Systems

Please also see the resources that SFU IT Services has put together to support remote access: h

Last updated @ 2020.09.22

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- This is what the top section of the web page looks like:

- Again, become familiar with its whole content by reading what it says

- Then click on this link

Home / About Computing Science / Facilities And Support / COVID-19 Response: Working Remotely / Access To CSIL Systems

ACCESS TO CS INSTRUCTIONAL LABS (CSIL) AND SYSTEMS

We provide CSIL Linux CPU Servers and a CSIL Windows Terminal Server for remote access. In addition, to support your remote access during the COVID-19 pandemic we have made most of the CSIL Workstations, both Windows and Linux available for remote access. Following links will give you the details on how to access all these systems.

- Accessing CSIL Windows Systems
- Accessing CSIL Linux Systems
- If you need Direct Access to a Lab

CSIL Windows

Both the **CSIL Windows Terminal Server** and **CSIL Windows Workstations** can be accessed remotely using an RDP client for the OS running on your laptop/desktop computer. In each case, you will have access to your **'U:' drive** (SFUHOME) where you normally keep your important files.

Our CSIL Windows Terminal Server is a powerful machine that allows multiple users to login and work simultaneously. It has most of the software you need for course

▶ This link takes you down the web page to this section:

CSIL Linux

Both the CSIL CPU Servers and Linux Workstations can be accessed remotely in different ways from your laptop/desktop computer. Once connected, you will have the familiar Linux environment with access to your roaming profile under your home directory and your 'sfuhome' directory where you store all your important files.

The CSIL CPU Servers are Linux servers which allow many users to connect to them simultaneously and run command-line programs. You cannot run graphical applications on these servers.

CSIL Linux Workstations on the other hand allow you to run graphical applications. Although Linux allows multiple users to login to these systems, it is best to pick one for yourself if you plan to run graphical applications.

For details on how to connect to a CSIL Linux system, read the page below:

CSIL Linux Remote Access page

▶ You should have already read this section, so make sure you have read what it says about `sfuhome` and the difference between `CSIL CPU Servers` and `CSIL Linux Workstations`

  ▶ Example of graphical (GUI) applications are `Chrome`, `Firefox`, and `Sublime`

▶ Then click on the link *CSIL Linux Remote Access page*

Remote login to CSIL – 5 of 6

➤ This is the most important web page – you may want to bookmark it!

Home / About Computing Science / Facilities And Support / COVID-19 Response: Working Remotely / CSIL Linux Remote Access

CSIL LINUX REMOTE ACCESS

Choose how you want to connect based on your needs, considering that graphical applications would normally require higher internet bandwidth. For example, if you only need to compile a program using the gcc compiler or use git, you may only need access to the command line. On the other hand, if you need multiple GUI applications like an IDE, file explorer, etc., you might want to have a full Linux desktop.

Here is a summary of what you can do and which tools you could use to connect:

To run	Use from Windows	Use from Linux	Use from Mac
Non-GUI applications	MobaXTerm, puTTY	ssh from a terminal window	ssh from a terminal window
Individual GUI applications	MobaXTerm	ssh from a terminal window (with -X/Y and -C options)	XQuartz (with -X/Y and -C options)
GUI desktop	Remote Desktop Connection app	A remote desktop client (Eg. Remmina)	Remote Desktop Connection app

Note for students living outside of Canada:

CSIL Linux systems can only be accessed from a Canadian IP address. This means you either have to live in Canada or use a VPN product that allows you to connect from a Canadian IP. If none of the above applies to you, please pay attention to the specific notes in each section regarding access from outside.

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➤ More about this web page on the next slide …

Remote login to CSIL – 6 of 6

- Carefully read **all** that it says
  - Notice the section about **students living outside of Canada**
- Then remotely login to CSIL using each of the three ways:
  - Non-GUI Applications
  - Individual GUI Applications
  - GUI Desktop
- If some/all of these ways do not work for you, follow the troubleshooting instructions listed on this web page
- Make sure you can successfully remotely login to CSIL before our first lab (Lab 0) next Tuesday January 19

Downloading MobaXTerm or XQuartz

- To download a copy of **MobaXTerm**, click on the option <u>MobaXterm for Windows</u> on the menu to the left of our course web site

- To download a copy of **XQuartz**, click on the option <u>XQuartz for MAC</u> on the menu to the left of our course web site