# CS GRAD STUDENT ORIENTATION

Winter 2024



#### **TODAY:**

- 1. Welcome from CS Grad Directors
- 2. Computer Science Computing Facility w/ Lori Paniak
- 3. Library Services w/ Rebecca Hutchinson
- 4. CS Grad Student Association w/ Oluwaseun Cardoso
- 5. Grad Advocates on behalf of Kate Larson
- 6. Grad Office Orientation w/ the CS Grad Office team

#### SCHOOL OF COMPUTER SCIENCE GRAD DIRECTORS



Khuzaima Daudjee CS Grad Director



**Shane McIntosh** CS Associate Grad Director

# **COMPUTER SCIENCE COMPUTING FACILITY (CSCF)**

LORI PANIAK



# **CSCF Services**



Lori Paniak

Manager, Research and Special Projects (RSG)

Idpaniak@uwaterloo.ca

#### DC 2625

https://teams.microsoft.com/l/chat/0/0?users=ldpaniak%40uwaterloo.ca

Slides available on:

https://cs.uwaterloo.ca/cscf/information-graduate-students

### Very Short Version: Campus IT

• This doc: https://vault.cs.uwaterloo.ca/s/S3TW4KdtoyLZZbf



 Also: One-page flyer of IT services available https://vault.cs.uwaterloo.ca/s/Q2dM8CH8yoFboFF



### CSCF Structure: Three Groups

Infrastructure (INF) – Manager: Dave Gawley, plus 4 staff

 provides servers, network infrastructure, Active Directory, purchases all computing equipment for the School

Teaching and Administration (TOP): Manager: O Nafees, plus 6 staff

 supports all undergraduate teaching labs, plus administrative staff, the Instructional Support Group and School meeting rooms and audiovisual services

Research and Special Projects (RSG): Manager: Lori Paniak (me), plus 7 staff

- provides computing support for Faculty, Grads, PostDocs and Research Visitors
- Develop (web) Applications for the School and wider campus

### Workstations when you arrive

#### • Research grads

- Supervisor/you have choice of (including monitor):
  - PC Laptop Windows / Ubuntu
  - Mac Book Air (M1/M2)
  - Supervisor purchased system
- Expect an email from "RT" on this!
- Course Masters
  - RSG has surplus systems with Windows or Ubuntu, monitors...
- <u>https://cs.uwaterloo.ca/cscf/about/policies/graduate-student-workstation-options</u>

### Research Support

 Each group/faculty assigned a "Point of Contact" within the Research Support Group – that is your "go to" person

https://uwaterloo.ca/computer-science-computing-facility/getting-help/research-points-contact

- Other RSG staff will also help as needed
- Your point of contact has answers to all your IT questions (on campus and beyond)
- Can help out with workstations, clusters, grants, GPUs...

### CSCF Help Desk

- We have a Help Desk who can handle certain tasks
  - Setting passwords
  - Loan of equipment cables, display adapters, external drive bays, keyboards, mice
  - Assist with wireless issues
  - Take a problem report and get it assigned to appropriate staff
  - x31100, DC 2608 or <u>cscfhelp@uwaterloo.ca</u>
  - <u>https://cs.uwaterloo.ca/cscf/getting-help/help-desk</u>

#### **Compute Resources**

- School Linux servers: linux.cs.uwaterloo.ca
- Student Linux servers: linux.student.cs.uwaterloo.ca
- School Windows servers: windows.cs.uwaterloo.ca
- GPU cluster: watgpu.cs https://watgpu.cs.uwaterloo.ca/
- VM server: https://andromeda01.cs.uwaterloo.ca
- On demand servers: https://paper.cs.uwaterloo.ca

### File Storage

- Ceph distributed cluster 500GB+ per student
  - Home directory under linux.cs
  - P: drive under Windows.cs and Windows workstations
  - <u>smb://smb-files.cs.uwaterloo.ca</u>
  - S3 buckets
- Backup
  - Files are backed up regularly
  - Snapshots: cd .snapshot in any directory, files stored by hour, day, week

### NextCloud (DropBox-like service)

- Locally stored on ceph cluster
- Up to 500GB per grad student (ask if you need more)
- Access at: https://vault.cs.uwaterloo.ca
- Download NextCloud clients or web access
- Documentation: <a href="https://cs.uwaterloo.ca/twiki/view/CF/Vault">https://cs.uwaterloo.ca/twiki/view/CF/Vault</a>

### Web pages

- <u>www.cs.uwaterloo.ca/~youruserid</u>
- Files in linux.cs home directory under "~/public\_html"
- Create / update index.html
- Make sure to assign "world read" to your web files
  - %chmod o+r index.html

### Email

• youruserid@uwaterloo.ca

- Grad students automatically given a Office 365 account
- -> can redirect wherever you prefer
- Your own account (Gmail, Hotmail, etc)
- You can also configure a "friendly" email address, eg:
  - Lawrence.Folland@uwaterloo.ca
  - Do that in <a href="https://idm.uwaterloo.ca/watiam/login.jsf?prompt=true">https://idm.uwaterloo.ca/watiam/login.jsf?prompt=true</a>
    - Manage Email Settings

### Printing

- Can print to any of our printers listed on our CUPS server:
  - <u>http://print.cs.uwaterloo.ca:631/printers/</u>
  - Or <u>\\printers.cs.uwaterloo.ca</u> (in Windows)
    - (login with your CS-GENERAL\userid credentials)
- Setup notes:
  - <u>https://cs.uwaterloo.ca/twiki/view/CF/WindowsPrinting</u>
  - <u>https://cs.uwaterloo.ca/twiki/view/CF/LinuxPrinting</u>
  - <u>https://cs.uwaterloo.ca/twiki/view/CF/MacPrinting</u>
- Note: printing is tracked but not quota limited
- <u>https://cs.uwaterloo.ca/cscf/services/printing</u>

# High Performance Computing (SCS)

- Faculty-provided servers/clusters: thousands of CPU cores/dozens of GPUs!
  - Syn cluster Salem/Wong/Brecht (Data Systems Group)
  - RIPPLE Ian Goldberg (CrySP)
  - Tembo Khuzaima Daudjee
  - CloudNetwork Raouf Boutaba
  - M160 Ming Li (Bioinformatics)
  - Daytona Poupart/Hoey/Lizotte (Health Informatics)
  - Husky Ihab Ilyas (DB)
  - Chippie Cybersecurity and Privacy Institute
  - Novo Bin Ma (Bioinformatics)
  - datasci.cs
  - Various other servers

<u>https://cs.uwaterloo.ca/twiki/view/CF/HighPerformanceComputingResources</u>

### HPC – SHARCNET/Compute Canada

- Compute Canada provides batch computing for large numbers of cores / memory
- 1 TB storage
- Requires a Compute Canada account based on faculty sponsorship (your supervisor needs to have an account to sponsor yours)
- There is no cost to use these resources
- Systems and accounts:

https://alliancecan.ca/en/services/advanced-research-computing/federation/national-host-sites

https://alliancecan.ca/en/services/advanced-research-computing/account-management/apply-account

### Software

- Windows can be put on any Research / Teaching machine
- MS Office campus license
- <u>Visual Studio</u> free Academic license
- <u>VMWare</u> Math license covers vSphere Enterprise Plus, vCenter, vCloud Director, vCloud Suite, Workstation, Fusion, etc. – for research / teaching machines
- Maple free for UW users
- MatLab free for UW users
- Others talk to your Point of Contact

### Questions? Feedback?

Lori Paniak Idpaniak@uwaterloo.ca DC2625



Slides available on:

https:// cs.uwaterloo.ca/cscf/information-graduate-students

# **LIBRARY SERVICES**

#### **REBECCA HUTCHINSON**



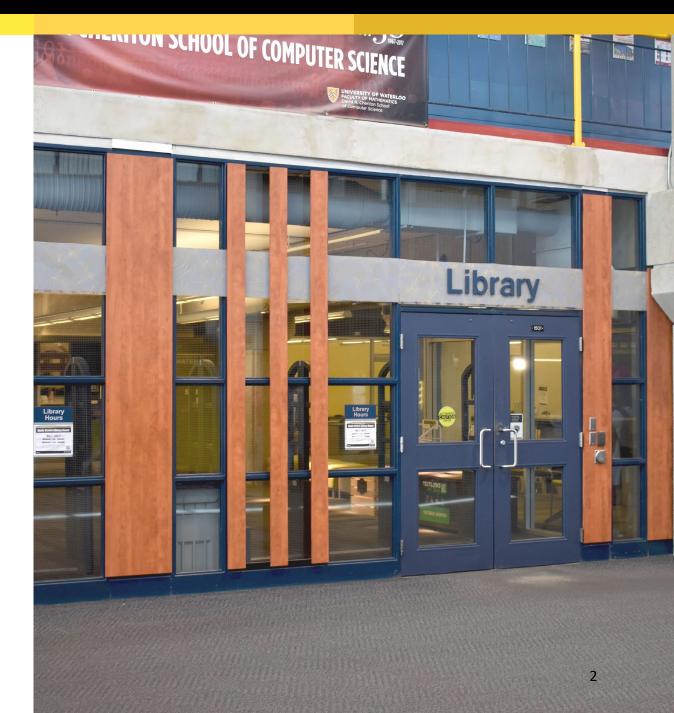
#### **Computer Science Grads and the Library**

Rebecca Hutchinson, Computer Science Librarian r3hutchi@uwaterloo.ca





#### **Davis Centre Library**





#### **Library Space**

- Davis Centre Library
  - 8am–12am Monday–Friday
  - 11am–12am Saturday & Sunday
  - <u>Computer science collection</u>
  - Computers, printing, photocopying, and scanning
  - Individual study space
  - Group study space
  - IST Help Desk
  - Library Help Desk
- Dana Porter and other libraries on campus



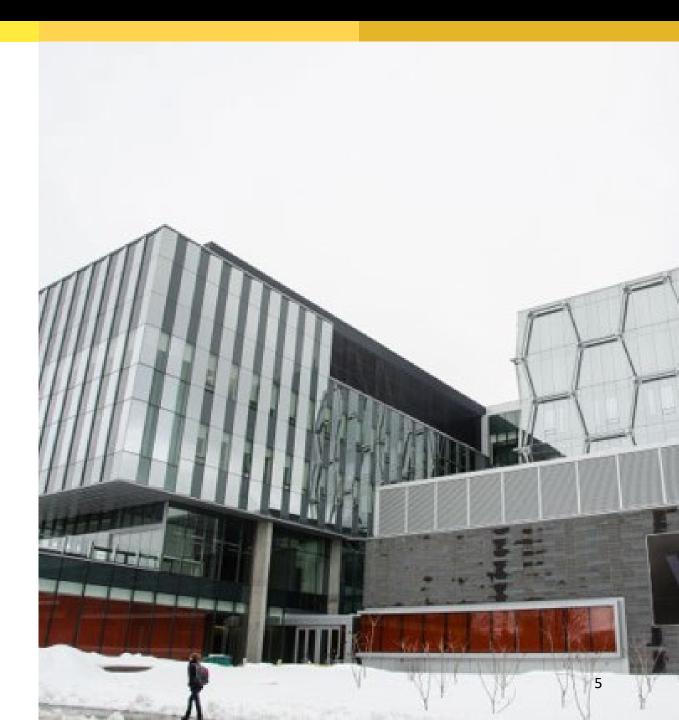
#### **Library Services**

- Access to online journals, articles, conference papers, and books
  - Start at the <u>Library's website</u> for access to full text
- Print books
  - Request a print book through the <u>library's catalogue</u>
  - Pick it up from the Help Desk or have it mailed to you (within Canada)
- Research support
  - <u>Computer science guide</u> has discipline specific resources to help you find e-books, online papers, and more
  - Email your Librarian <u>r3hutchi@uwaterloo.ca</u>, <u>book a meeting</u>, or <u>chat through Teams</u>
- More help
  - Library Chat and FAQs



#### **Personalized Research Support**





#### **Computer Science Librarian**

- My job is to connect you with the information, resources, and knowledge you need to be successful with you course work and thesis
  - Virtual and in-person consultations available
  - Designed for your specific research needs
  - Not sure if I can help? Just ask!



#### Consultations

- Copyright questions
- Publishing questions
- Searching the literature
- Managing research data
- Tracking scientific impact
- Citing and citation software
- And more!



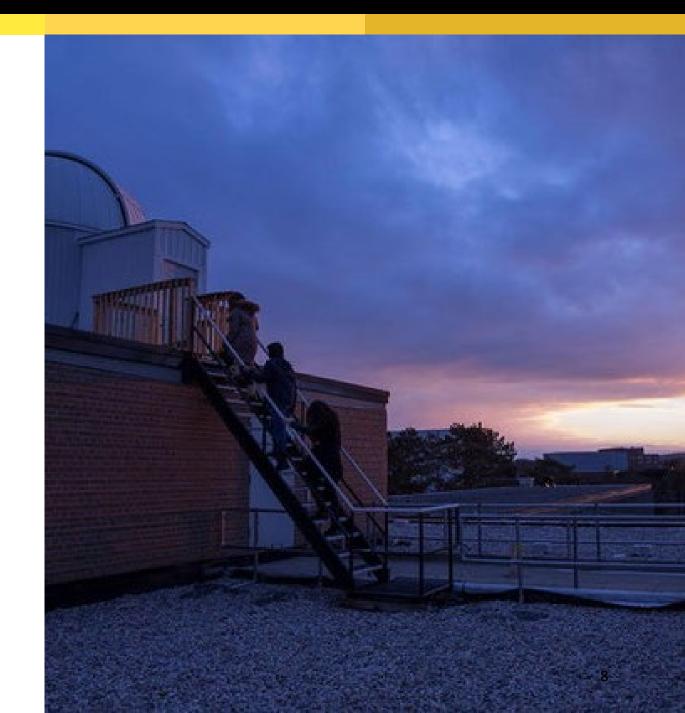
#### **Get Started!**

Library website

Computer Science Research Guide

Book a meeting





# **CS GRAD STUDENT ASSOCIATION**

#### **OLUWASEUN CARDOSO**

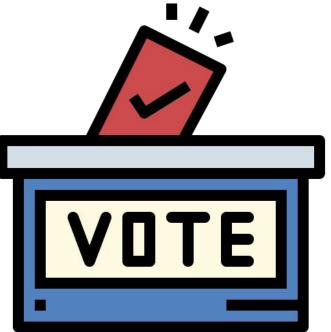




Computer Science Graduate Student Association (CSGSA) T.



#### ELECTIONS FOR THE NEXT CSGSA BOARD





#### FIRST EVENT FOR THE TERM: MONDAY FEBRUARY 12TH 4PM



#### **ON BEHALF OF KATE LARSON**



## Graduate Advocate

Responsible for interacting with graduate students on matters that are not directly related to their graduate program

- Items you want brought to the grad director's attention but are not comfortable discussing with them directly
- Second opinion on advice, requests, comments made to you by your supervisor
- Changing supervisors
- ...

# Everything is "off-the-record" unless you desire otherwise.

#### CS Advocate

• Kate Larson (kate.larson@uwaterloo.ca)



You can also talk to other advocates in the Faculty of Math (https://uwaterloo.ca/math/graduate-advocates)

# **GRAD OFFICE ORIENTATION**

### **CS GRAD OFFICE TEAM**



## GraduateStudent OrientationWinter 2024

Funding ~ Nadine Zinger/Carly McLeod - <u>cfinance@uwaterloo.ca</u>

Masters Thesis ~ Carly McLeod - cjemcleod@uwaterloo.ca

**PhD** ~ Nadine Zinger - <u>nkzinger@uwaterloo.ca</u>

**General Inquiries** ~ Co-op, Samantha Khan (Winter 2024) - CS-Gradoffice@uwaterloo.ca

TA Eligibility - Tara Haghighi - thaghi@uwaterloo.ca

**Scheduling/Events** ~ Amy Todd - <u>amy.todd@uwaterloo.ca</u>

**Scholarships/Manager** ~ Denise Shantz - <u>denise.shantz@uwaterloo.ca</u>

Please email any of us anytime. We will reply via email and book an MS Teams or in person meeting. We are here to help you.

CS Graduate Office DC 2599





### **GRS Funding**

It is important to remember that just like your academic career, your funding is also your responsibility to track and manage. It can be complicated but you do need to understand all of your funding.

Please be sure to check your offer letter, <u>review eligibility and time length of any scholarships</u> noted and reach out to the appropriate coordinator so you can better understand it all.

If you think you are missing something, OR if you think you received too much, please ask as you should always know how much money to expect each term!

You can refer to this link for the basic funding received within program time limits https://vault.cs.uwaterloo.ca/s/Qy7TZ8xbPqLq9Za

#### Remember we are here to help!

Please direct your questions to:

- I) TA payroll and GRS Funding to cfinance@uwaterloo.ca
- 2) Scholarships to Denise.Shantz@uwaterloo.ca
- 3) PhD to NkZinger@uwaterloo.ca
- 4) Master's to Cjemcleo@uwaterloo.ca



### **GRS Funding (continued)**

We <u>try</u> to balance your pay to be equal each term. Overall, your termly posted funding will match total on offer of admission (over 3 terms).

- TA Assigning may vary
- Funding is based on 4 TA units per year.
- MMath first year: two terms will be 1 TA, one term 2 (double) TA's. Only 1 double TA over program timeline
- PhD each year: two terms will be I TA, one term 2 TA's
- Terms with 2 TA's you are not paid extra. We adjust your GRS pay to balance the total
- If you used a promissory note for tuition payments: Quest uses funding first to pay tuition. If refunds remain, will be deposited to your Canadian bank account.
- If GRS funding does not cover the full balance on Quest, the remaining outstanding balance is divided by 4 and deducted from your monthly TA pay cheque (over 4 months). You can see this deduction on your pay cheque.



#### Masters Student interested in Co-op

- Master's Thesis students interested in Co-op are required to complete 3 mandatory information sessions prior to changing their program to co-op.
- If you are interested in co-op, please read the process noted here, https://cs.uwaterloo.ca/ currentgraduate-students/overview-degree-programs/master-mathematics-computer-science under MMath Coop Option
- Attending these sessions does not commit you to the program, but it will give you valuable information.
   And again, these must be completed before you can change into co-op.
- Please watch for email with instructions
- Please refer to our website here for more information https://cs.uwaterloo.ca/current-graduatestudents/overview-degree-programs/master-mathematics-computer-science
- After reviewing the website if you have any questions, feel free to contact the Carly McLeod (cjemcleod@uwaterloo.ca)



#### TA pay is paid to students on the last Friday of each month and is taxed

- CDN Bank account necessary for direct deposit of pay
- If you are assigned a TA you will receive an email from Workday within the first month of term regarding on-boarding. This is your opportunity to submit your banking information for your pay.
- TA pay can only be viewed on Workday. You cannot view TA information on Quest. Once TA pay is submitted, you can do your onboarding. You will then have access to Workday and can see your pay once it has been paid
- New TA's should have received an email regarding the mandatory training taking place. If you are not TA'ing this term, but plan on TA'ing in the future, please still attend.
  - Please refer to this link for information on Graduate Incidental Fees for your start term: https://uwaterloo.ca/finance/graduate-program-tuition



### **Course Enrolment**

- Use QUEST until class enrollment period ends as per https://uwaterloo.ca/graduate-studies-postdoctoral-affairs/importantdates/list (normally 3rd Sunday of first month).
- After this date; no adding courses and if any are dropped they will show as withdrawn (WD) on your transcript.
- Additional courses taken for credit but not included in your program requirement must be assigned XTRA and submitted on a DROP/ADD form ASAP.
- REMEDIAL/AUDIT/READING courses add with a DROP/ADD form. Remedials must be completed in your first 2 terms.
   You should receive an email from the Undergrad office with a permission # for any remedial courses.
- EMLS (remedial courses) do NOT count towards a student's grad course count for a term.
- EMLS 601R (speaking) & 602R (writing) can be taken in the same term.
- NOTE: Please only enroll in the number of courses you are allowed to take that term for your program.
- Please do not over enroll and tie up spots from other students who might need that particular course to complete their degree! Course enrollment is monitored and we do not want to email you to drop courses.



### International Students:

- Need SIN card to work in CANADA and a specific condition on your study permit allowing you to work part time
- Co-op is a different permit
- For information on permits, please contact the Student Success Office, South Campus Hall, second floor or at success@uwaterloo.ca

#### https://uwaterloo.ca/student-success/

- In order to get paid for TA, you provide your SIN Number to Human Resources as soon as you get one.
   This is completed as part of your onboarding through Workday.
- International Graduate students are charged the UHIP fee during every term, including Inactive terms, to ensure continuous coverage for the duration of your program. If you have a family member here they MUST register for UHIP within 30 days!
- For any questions regarding this please see International Advising in the Student Success Office



### **Administrative Topics**

- 1. EMAIL account is set up automatically at the time of enrollment. Check your **UW email** regularly.
- UW UG students, reminder that you must be using your email @uwaterloo.ca and not @edu.uwaterloo.ca
- 3. Update **LOCAL MAILING ADDRESS** on QUEST as soon as possible. As the university will use this as primary mailing address.
- 4. Mailboxes: Located in DC 2583
- 5. Keys/Fobs: If you haven't picked up your keys/fobs yet, please contact Greg McTavish by emailing him at gmctavish@uwaterloo.ca
- 6. Please take time to review the 'Important Links for Graduate Students' that will be included in your summary email. They are a great resource!



### **AdministrativeTopics continued**

7. General deadlines/information ~ Please take the time to read our weekly/bi-weekly newsletters

8. Please be sure to complete 'The Confidentiality Agreement' on Learn. More information on this to come.

9. Please complete forms electronically

10. Your graduate program is your responsibility. Please stay informed on processes and requirements. Feel free to ask your supervisor/coordinator for clarification any time.



### Training

Please complete the 4 mandatory sessions in the first 8 weeks.

- Academic Integrity Module (AIM) through Waterloo Learn
- **Workplace violence awareness** (30 60 minutes to complete)
  - Two components to this training. Many miss the harassment training through the Conflict Management and Human Rights Office (CMAHRO). Both should take 45-60 mins to complete and you must receive a minimum grade of 72% (8 out of 11). Redo until minimum grade received. **This is required by Faculty of Mathematics teaching assistants.**
  - Please see the new "Mathematics graduate teaching assistant" webpage (item #2) for more details: https:// uwaterloo.ca/math/current-graduate-students/mathematics-graduate-teachingassistant.
- **Employee safety orientation** (60 minutes to complete)
- **WHMIS 2015** (45 60 minutes to complete)



# **External Scholarship applications**

- OGS Domestic and International applications are due February 1, 2024
- NSERC Doctoral transcript requests are normally due in September and applications in October
- Tri-Agency CGSM transcript requests are normally due in November and applications in December

Please read your bi-weekly (weekly) CS Grad Newsletters from 'CS-Grado@uwaterloo.ca' for updates to these and other scholarships



### **Thank You!**

If you have any questions, please feel free to contact:

TA Payroll and GRS Funding ~ Nadine Zinger/Carly McLeod (cfinance@uwaterloo.ca)
Scholarships ~ Denise Shantz (denise.shantz@uwaterloo.ca)
PhD ~ Nadine Zinger (nkzinger@uwaterloo.ca)
Master's ~ Carly McLeod (cjemcleod@uwaterloo.ca)
Scheduling/Course Enrollment ~ Amy Todd (amy.todd@uwaterloo.ca)
TA Eligibility - Tara Haghighi (thaghi@uwaterloo.ca)
General Inquiries ~ (cs-grado@uwaterloo.ca)

### UNIVERSITY OF WATERLOO



Canada's Innovation University

### UW IT Services Quick-Start (2024-01-07) This document available at: <u>https://vault.cs.uwaterloo.ca/s/Q2dM8CH8yoFboFF</u>

**IST Helpdesk** - Contact for general campus IT support and questions https://uwaterloo.ca/information-systems-technology/help



Campus Services								
Name	Description	Advantage / Usage	Where to Find	Requires	Contact			
authman	Register an SSH key to access several services	All keys can be handled in one place. Some CSCF services depend on authman	https://authman.uwaterloo.ca	Campus / WATIAM account				
IST Knowledgebase	Knowledgebase of the systems and features of UW	Learn about the systems and features UW offers, and how to use them	https://uwaterloo.atlassian.net/wiki/ spaces/ISTKB/overview_	Campus / WATIAM account				
IST VPN	Provides a VPN for UW websites only.	Sign into using Cisco AnyConnect. Provides more secure internet to (only) UW websites	https://uwaterloo.atlassian.net/wiki/ spaces/ISTKB/pages/1540588259/ Use+the+Campus+Network+VPN+Sig n-in+using+Cisco+AnyConnect	Campus / WATIAM account				
WATIAM	Account system of UW	Manage your email friendly alias and change your campus password	https://uwaterloo.ca/watiam/	Campus / WATIAM account				
Workday	Human resources (HR) admin	Check your benefits, payslips, and access the university organigram.	https://wd3.myworkday.com/uwaterloo	Campus / WATIAM account				
Learn	Campus teaching portal	Access for instructors and students	https://learn.uwaterloo.ca/d2l/home	Campus / WATIAM account				
Finance	Campus finance portal	Access to Unit4, Concur accounting	https://uwaterloo.ca/finance- resources/	Campus / WATIAM account				

**CSCF Helpdesk (DC2608)** - Contact for all general and CS specific IT support and questions. Also has cables, adapters, power supplies and other small items for loan https://uwaterloo.ca/computer-science-computingfacility/getting-help/help-desk



CSCF Services								
Name	Description	Advantage / Usage	Where to Find	Requires	Contact for access			
cluster - andromeda	Service for virtual machine (VM)	Virtual machines of up to four CPU cores and 64GB	https:// andromeda01.cs.uwaterloo.ca	Campus / WATIAM account	Self-serve			
cluster-paper	Bare-metal computer reservation	A6000 GPUs, 192GB RAM on three GPU systems. 32 smaller systems	https://paper.cs.uwaterloo.ca	SSH key via authman	Self-serve			
cluster- WATGPU	Cluster equipped with GPU	Multiple Ada 6000 GPUs	SSH to watgpu.cs.uwaterloo.ca	SSH key via authman	Lori Paniak <u>Idpaniak@uwaterloo.ca</u>			
CSCF services catalog	Catalog of the services offered by CSCF	Learn about the services offered, and how to get them.	https://uwaterloo.ca/computer- science-computing-facility/services					
Linux	School of Computer Science (SCS) Linux login service	Access Linux environment from anywhere	SSH into linux.cs.uwaterloo.ca	SCS account and SSH key / Yubikey	Your RSG Point of Contact			
Password set/change	Set or change your SCS domain password and shell	Easily set/change personal or teaching domain password and shell	https://cs.uwaterloo.ca/password/					
Research Point of Contact page	Find your CSCF RSG support contact	For research and general IT support, configuration and purchasing	https://uwaterloo.ca/computer- science-computing-facility/getting- help/research-points-contact					
SCS VPN	SCS local network access	Full-tunnel VPN (all sites will run through the VPN)	https://vpn.cs.uwaterloo.ca	SCS account	Lori Paniak Idpaniak@uwaterloo.ca			
Vault	Alternative to OneDrive / DropBox	Managed by CSCF. Has better sharing options.	https://vault.cs.uwaterloo.ca	SCS account	Lori Paniak Idpaniak@uwaterloo.ca			