

Upcoming Training

Our fall training kicks off next week with two brand new workshops - *Basics of Computers* and *Introduction to Spreadsheets*. The ACENET Basics Series will follow the week of September 27th.

As our training has ramped up over the past year, there are now **too many sessions to list!** Check out the ones happening over the next few weeks below, but for a full listing, see our <u>website</u>. All ACENET sessions are online through the fall.

Basics of Computers

20 September, 12:00-14:00hrs Atlantic

Most of us have experience using a computer, whether for school, work, or entertainment, but how many of us have actually had an expert teach us how to use it? This talk won't teach you how to troubleshoot everything, but will give you insight to how media, programs and data are encoded and used by computers, so you can make more sense of why computers behave the ways they do, and solve some of your problems with greater efficiency and less frustration. We will provide an approachable overview of how a computer works, by both looking at their history and breaking one down to explain individual components, before highlighting some of the trade-offs to consider when buying a computer. We will

provide practical, simple, and actionable advice on digital security and show you a few "pro tips" on how to make the most of your workstation, phone, or whatever device you happen to use. Whether you have a lot or a little experience using your digital technology, if you want to learn how to use your devices more effectively, this workshop is for you! <u>DETAILS & REGISTER</u>

Introduction to Spreadsheets

22 September, 12:00-14:00hrs Atlantic

This is a hands-on introductory workshop focused on fostering best practices for data organization in spreadsheets. Participants will learn how to organize their data to prioritize clarity, reproducibility, and interoperability, such that they can seamlessly load their data later into an analysis program. The spreadsheet programs covered will be Microsoft Excel and Google Sheets. The examples explored will be from the field of Social Sciences, but the principles are relevant for any discipline that collects data in spreadsheets. No previous experience with spreadsheets or programming is required. DETAILS & REGISTER

Introduction to High Performance Computing (HPC) with ACENET & Compute Canada 27 September, 12:00-13:30hrs Atlantic

This is a beginner session. Researchers across many disciplines use HPC to tackle analyses that would be either inefficient or impossible on a desktop. This session offers: a basic description of the infrastructure and support accessible through Compute Canada and ACENET, with entry-level advice about how to begin; an overview of the software packages available through Compute Canada and ACENET for applications, data analysis, and software development, and how to request specific software relevant to your work; and insight into the potential of parallel computing to accelerate your analysis. DETAILS & REGISTER

Introduction to Linux

28 September, 12:00-13:30hrs Atlantic

This workshop is designed for those with no prior experience in working with a terminal interface. To access and use the ACENET and Compute Canada HPC clusters from your desktop, you will use a text-based "command line" interface. You will use the command line to move data around and run calculations. In this session, learn how to get started with the command line and how to perform some basic tasks: create and navigate directories for your data; upload and download files; manage your storage; and run programs on the computing clusters. DETAILS & REGISTER

Introduction to Shell Scripting

29 September, 12:00-13:30hrs Atlantic

This workshop is designed for both new and experienced users. You'll learn how to use the command line to carry out repetitive tasks, extract information from files quickly, combine commands in powerful ways, and capture a workflow so you can re-use it easily. Save time, reduce errors, and use Linux more effectively. Prerequisite: ACENET Basic Series Introduction to Linux, or previous experience with Linux. DETAILS & REGISTER

Job Scheduling with Slurm

1 October, 12:00-13:30hrs Atlantic

This workshop is designed for either new HPC users, or for experienced users either transitioning to

Slurm or seeking to improve efficiency with the scheduler. Compute Canada's national systems use a job scheduler called "Slurm". In this session you will learn how Slurm works and how it allocates jobs, helping you to: minimize wait time by framing reasonable requests; ask for only the resources you need, to improve efficiency; increase throughput; run more jobs simultaneously; and troubleshoot and address crashes. Prerequisites: Completion of Introduction to Linux and Introduction to Shell Scripting, or prior experience with both. DETAILS & REGISTER

R for Ecologists

6 October, 12:00-15:00hrs Atlantic

Join ACENET and Ocean Tracking Network (OTN) in our Introductory R for Ecologists workshop series. Over three weeks, we will explore data analysis and visualization with R, based on the Data Carpentry Lessons. We will start with basic R syntax and the R Studio notebook interface. Then, we'll teach you how to import CSV files, the structure of data frames, how to deal with factors, how to add/remove rows and columns, how to calculate summary statistics from a data frame, and a brief introduction to plotting. The last lesson demonstrates how to work with databases directly from R.

DETAILS & REGISTER

From Our Partners

The following webinars are being offered by our regional partners.

Calcul Québec : Introduction à la ligne de commandes Unix (en ligne, UNX101)

21 septembre, 10h00-13h00 atlantique S'INSCRIRE

Calcul Québec : Introduction to Unix Shell (online, UNX101)

21 septembre, 10h00-13h00 atlantique S'INSCRIRE

SHARCNET: ROCm: AMD's Platform for GPU Computing, 22 September, 13:00-14:00hrs

Atlantic **REGISTER**

Calcul Québec : Prétraitement des données avec OpenRefine (en ligne, DAT101), le 28

septembre, 10h00-13h00 atlantique S'INSCRIRE

Calcul Québec: Data cleaning with OpenRefine (online, DAT101), 29 September, 10:00-

13:00hrs Atlantic REGISTER

Additional

More training sessions from our regional partners can be viewed at <u>Calcul Québec</u> and <u>Compute</u> Canada.



HSS Tools of the Trade Forum

Join Lydia Vermeyden, our Research
Consultant in Humanities, Arts & Social
Sciences, and a guest speaker for a lunchtime
series on the last Friday of each month. **Tools**of the Trade focuses on discussions,
demonstrations and applications of digital
research tools in humanities, arts and the
social sciences. It's open to anyone interested.
For more information and to receive notices
about the series and sessions, click here.

The next Tools of the Trade session will be a panel discussion, Atlantic Digital Opportunities

Fair at noon on September 24th. It will provide an overview of upcoming digital opportunities for the 2021-22 academic year, focused on digital resources, skills, training and pedagogy for Arts, Humanities and Social Sciences.





ACENET Research Consultants Available

We'd just like to take a moment to remind you that our staff remain available to help you when you have questions, need some guidance, or have a particularly difficult problem you're trying to solve.

Some of our staff are available to meet you on campus, but all are able to meet with you virtually. Just email your local representative to set up a time, or contact support@ace-net.ca. You can find your local representative here.





NASA Space Apps Challenge St. John's

NASA's International Space Apps Challenge is the world's largest annual hackathon. At hundreds of local events around the world, participants work together to solve the most pressing global and space-related problems with data provided by NASA. This two-day hackathon includes engaging talks and workshops, and the projects are judged by academic and industry experts with top entries selected to compete internationally. Space Apps is a NASA incubator innovation program that exposes students to real-world industry challenges while highlighting the importance of teamwork.

The St. John's virtual Space Apps event is taking place October 2nd and 3rd, and two teams from the province will be nominated to compete at the international event. This is the first time it's taking place in NL, and it will be co-hosted by Students for the Exploration and Development of Space (SEDS-Canada), the MUN Ocean Sciences Undergraduate Society (OceanUS) and the MUN Engineering Society. The challenge is open to everyone, regardless of age or background, and you don't need prior coding experience.

In support of this exciting event, ACENET will be hosting a 2-day training workshop on Python, and Oliver Stueker, our research consultant in St. John's will be one of the mentors during the hackathon.



ACENET Partnering with ICTC

ACENET and the <u>Information and</u>
<u>Communications Technology Council</u>
(ICTC) are partnering to enhance the benefits of ICTC's post-secondary student wage subsidy program, <u>WIL Digital</u>.

Under the program, ICTC will subsidize up to 75% of an eligible student's wages, capped at \$7500, for a four-month work term focused on a project requiring supercomputing. The student can also participate in ICTC's elearning courses. Under ICTC's agreement with ACENET, the company can access ACENET's Siku system, technical consulting and support, and ACENET scheduled training sessions. In addition, the student will receive weekly mentoring from one of our research consultants. This is a combined value of up to \$13,000!

Applications must be from a registered business or not-for-profit organization. To learn more, check out our <u>information</u>
<u>sheet</u>, email <u>industry@ace-net.ca</u> or <u>t.perron@ictc-ctic.ca</u>.



RAC 2022 Q&A Session

Curious about how to apply for free computing and storage resources? Join our Q&A session on September 30.

Take a Tour of our New Website!



We've recently refreshed our website to better reflect and serve the needs of our diverse audiences. You'll still find our training catalogue and upcoming sessions on our training page. You'll also see other events that may be of interest on our News & Events page. And don't miss our Showcase to see what other researchers in the region have been up to.

Please take a look at our new look and let us know what you think at michele.fash@ace-net.ca.



Each fall, Compute Canada invites researchers to apply to our annual Resource Allocation Competitions (RAC) and request storage and compute resources beyond what can be obtained via the Rapid Access Service.

These competitions are open to researchers from all disciplines based at Canadian academic institutions who are eligible to apply for funding from the federal granting agencies.

RAC 2022 will launch on September 23, 2021. To learn more about this year's competitions, we are hosting an online Q&A Session. Everybody is welcome.

30 September, 13:00-14:30hrs Atlantic Register





Séance d'information pour les concours d'allocation des ressources 2022

Séance d'information pour les utilisateurs qui souhaitent s'informer et participer au concours d'allocation des ressources pour 2022.

Tous les automnes, Calcul Canada invite les chercheuses et chercheurs à présenter une demande à ses concours d'allocation des ressources (CAR) annuels pour leurs besoins en espace de stockage et en ressources de calcul qui dépassent ce qu'ils peuvent obtenir par le service d'accès rapide.

Cette année les concours seront ouvert le 23 septembre 2021.

Cette séance d'information s'adresse aux utilisateurs de Calcul Québec et Calcul Canada qui souhaitent s'informer et participer au concours d'allocation des ressources pour 2022.

Une courte présentation en français permettra de mieux comprendre le processus d'allocation ainsi que les changements pour 2022. La présentation sera suivie d'une période de questions bilingue.

le 1 octobre, 13h00 à 14h30 atlantique S'inscrire



A Heartfelt 'Thank You' for Years of Service

Appointed by ACENET's Board of Directors, on October 8th, 2014, Dr. Andrew Rutenberg began his official tenure as ACENET's Principal Investigator (PI) and Chair of our Research Directorate, although he had been involved in the RD for several years prior to that. Following almost seven years of service as PI, Andrew has stepped down.

For those who don't know, ACENET's Research Directorate is made up of nine researchers from institutions across the region and representing a range a disciplines. Its job is to advise ACENET on scientific and technical issues related to providing the best service possible to our researchers. For more information, including the current members, please see our website.

Andrew is a biological physicist at Dalhousie University. He develops computational and theoretical models of soft-materials and statistical systems within living bodies. His particular interests include organismal aging and mortality using a mixture of Machine Learning, Complex Networks and Stochastic Simulation.

"As a consortium of universities and community colleges in Atlantic Canada, ACENET is proud to support advanced research computing activities in our region," said Dr. Neil Bose, chair of ACENET's board of directors and Vice-President (Research) at Memorial University.

"Under Andrew Rutenberg's direction, our Research Directorate has played a critical role in advising our team on the technical direction and strategic decisions on how to enhance ACENET's operations. Andrew has been a strong voice and advocate for researchers and our partners, providing invaluable guidance and leadership. I thank him for his service as the principal investigator of the Research Directorate and wish him well in his future endeavours."

Over the course of his time as ACENET PI, Andrew and the RD helped us through Compute Canada's national infrastructure renewal initiative commencing in 2015, the result of which was the five current state-of-the-art national systems. During his tenure, the four regional partners and Compute Canada evolved into the Compute Canada Federation, working as a partnership to ensure equitable researcher access and consistent user experience across the country with our resources. More recently, the RD has provided input to the New Digital Research Infrastructure Organization (NDRIO) that is replacing Compute Canada next April.

Andrew's commitment to ACENET and belief in our value to Atlantic Canada has never wavered. He fervently supports equitable access to advanced computing resources for all researchers, regardless of project size, at all stages of their careers, and at institutions both large and small. When called upon for input, he and the RD have encouraged local researcher participation and formulated numerous responses to national consultations and initiatives over the years.

A strong proponent for student development, particularly undergraduate students, he was the force behind our 2015-18 student fellowship program, which provided \$440,000 to 52 graduate and undergraduate students.

Under Andrew's leadership, the RD was integral to ACENET's 2017 success in re-funding under the Canada Foundation for Innovation (CFI) MSI-2 program, and the 2019 creation of ACENET's Siku

system, which allowed us to begin serving Atlantic Canada's industry R&D community.

We are sincerely grateful to Andrew for his years of service to ACENET and wish him all the best as he tackles new challenges.

