



ACENET

accelerate discovery

Upcoming Training

Our fall training begins next week! Note that all sessions are online.

Be sure to check our [website](#) regularly, as additional training sessions and events of interest will be posted as they are scheduled.

ACENET Basics Series

These core sessions introduce the essentials of advanced computing at ACENET and Compute Canada and are designed to help new users of advanced computing get up and running. No experience is necessary.

Introduction to High Performance Computing (HPC) with ACENET & Compute Canada

15 September, 10:00-11:30am 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

16 September, 10:00-11:30am 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

17 September, 10:00-11:30am 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

18 September, 10:00-11:30am 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](#)

Research Computing Workshop Using Python

21, 23, 28 and 30 September, 12:00-4:00pm Atlantic

This is a beginner level series. Using software-carpentry.org materials, the series will introduce you to the Unix Shell, Version Control with Git and Python. It will be hands-on and cover the fundamentals of Python, including data types, conditional statements, loops and functions, as well as program design, version control, data management and task automation. It will teach the practical knowledge needed to start programming, debugging and using Python in everyday tasks. The workshop will be of interest to: active computational researchers and their teams; anyone considering a research project that requires

computational research; and students eager to enhance their career choices by expanding their skill set. *Space is limited so register early.* [DETAILS & REGISTER](#)

Research Computing Workshop Using R

6, 13, 20, 27 October, 10:00am-2:00pm Atlantic

This is a beginner level series. Using software-carpentry.org materials, the series will introduce you to the Unix Shell, Version Control with Git and R. It will be hands-on and cover the fundamentals of R, including data types, conditional statements, loops and functions, as well as program design, version control, data management and task automation. It will teach the practical knowledge needed to start programming, debugging and using R in everyday tasks. The workshop will be of interest to: active computational researchers and their teams; anyone considering a research project that requires computational research; and students eager to enhance their career choices by expanding their skill set. *Space is limited so register early.* [DETAILS & REGISTER](#)

Cloud From A to Z

19, 21, 26, 28 October, 2:30-4:30pm Atlantic

This is a beginner level series. Cloud computing provides great flexibility, allowing complete control of the computing environment. In addition, the environment can be copied, backed up, created and recreated in an automated way. In these lessons, we will start you on the path towards making use of the great flexibility and power of cloud computing. We will be using the popular static website generator [Jekyll](#). This is an in-depth workshop for those with no prior cloud experience, at the end of which you will have a virtual machine and a Jekyll website. *Space is limited so register early.* [DETAILS & REGISTER](#)

Programming Basics and Applications for Humanities & Social Sciences

5, 12, 19, 26 November, 3 December, 9:00am-1:00pm Atlantic

This is an introductory workshop for researchers and students who are interested in programming basics for humanities and social sciences applications. No prior experience in programming is necessary. Topics covered include an introduction to Unix Shell and Linux, websites and versioning with Git, regular expressions, Python for humanities and web scraping with Python. Applications include web scraping, survey field restriction, websites and text analysis. The workshop will use software-carpentry.org materials. *Space is limited so register early.* [DETAILS & REGISTER](#)

An Introduction to Graph Convolution Neural Networks and Background Theory

10 November, 11:00am-1:00pm Atlantic

The session introduces various machine learning and mathematical concepts leading up to GCNNs. Topics include various architectures of neural networks, such as feed-forward, convolutional and recurrent, and some of the mathematical theory underpinning their operations, with explanations of why each network is used. All are welcome, regardless of technical expertise. [DETAILS & REGISTER](#)

Safety First! Securing Your Compute Canada Virtual Machine

9 December, 10:00am-12:00pm Atlantic

This is a beginner to intermediate level session. Learn the best practices at Compute Canada for minimizing your risk for cyber attacks. Topics will include SSH security, firewalls, using logs and creating backups; all applied to running and maintaining cloud projects at Compute Canada. [DETAILS &](#)

[REGISTER](#)

From Our Partners

The following webinars are being offered by our regional partners.

Sharcnet: Options for Solving Jobs with Many Tasks, 9 September, 1:00-2:00pm

Atlantic [DETAILS & REGISTER](#)

WestGrid: Working with Multi-dimensional Datasets in Xarray, 30 September, 2:00-3:00pm

Atlantic [DETAILS & REGISTER](#)

WestGrid: Tips & Tricks on Getting Programming Help, 14 October, 2:00-3:00pm

Atlantic [DETAILS & REGISTER](#)

WestGrid: Advanced VMD, 28 October, 2:00-3:00pm Atlantic [DETAILS & REGISTER](#)

WestGrid: The Topology ToolKit, 25 November, 2:00-3:00pm Atlantic [DETAILS & REGISTER](#)

Additional

Training sessions from our partner SciNet can be viewed [here](#).



Acknowledgment to Training Instructors & Participants

ACENET has always prided itself on delivering largely in-person training despite the geographic challenges in Atlantic Canada, as that has been the preference of most of our users. When the COVID-19 lockdowns began, our instructors were in the midst of teaching courses. Rather than abandon the workshops, they pivoted within days to an online format, enabling participants to complete the sessions. This began the journey which culminated in delivering all of our 2020 spring and summer training online, including our usual four-day parallel computing school. We would like to acknowledge the dedication and adaptability of our trainers, the skills and efforts of our training coordinator, and the patience of all our training participants during these past months while we made this transition. As we begin our next training 'season', we are armed with enhanced skills and experience in online training, and the same level of commitment to deliver top quality training experiences. We look forward to seeing you on-screen!



New NDRIO Chief Executive Office

Established in 2019, the New Digital Research Infrastructure Organization (NDRIO) is a national not-for-profit organization that is working with other ecosystem partners and stakeholders across the country to

help provide Canadian researchers the digital tools, services and infrastructure they need to support leading-edge scientific excellence, research, innovation and advancement across all disciplines. As of April, 2022, NDRIO will be responsible for research data management (currently with the Portage network), research software (currently under CANARIE), and advanced research computing (currently under the Compute Canada Federation).

We would like to congratulate **Nizar Ladak** on his appointment as NDRIO's CEO, effective October 5th. Nizar is currently the CEO of Compute Ontario, one of our regional partners, so understands the digital research infrastructure landscape very well. We look forward to continuing to work with him in his new role.

[NDRIO News Release, August 18, 2020](#)



NDRIO Researcher Council

This past month, NDRIO placed a call for nominations and applications to its Researcher Council. The council is an important component of NDRIO's governance model, and its members will represent the diversity of the national research enterprise.

While ACENET is not involved in the selection process, we would like to thank researchers in Atlantic Canada who put their names forward to be a member of the Researcher Council. This is an important role that involves a demanding time commitment in the early days from people who are already busy, particularly with the added challenges in this academic year. We appreciate your dedication, and hope to have Atlantic Canada well represented in this national body!

