

### **Upcoming Training**

Be sure to check our <u>website</u> regularly, as additional training sessions and events of interest will be posted as they are scheduled.

#### **Digital Humanities Summer Institute (East) - DHSI East**

#### 26 - 30 April

The first DHSI-East course will be on databases. It is aimed at humanists and those with no prior database experience. Databases are the driving engine behind a large number of classic and cutting-edge digital humanities applications. DH tasks -- such as wielding enormous GIS maps, aggregating the social media of wikis and blogs, building large archival repositories and even generating the semantic

web -- all depend on some form of database. This course will introduce the inner workings of databases and demonstrate hands-on work with participants' own data sets to learn more about concepts like data normalization, relational table design, Structured Query Language (SQL), and effective long-term data management. <a href="DETAILS & REGISTER">DETAILS & REGISTER</a>

#### Programming Workshop: Unix Shell, Version Control and R

#### 4, 11, 18 and 25 May, 12:00-4:00pm Atlantic

This is a beginner level workshop series that is hands-on, covering the fundamentals of R, including data types, conditional statements, loops and functions, as well as program design, version control, data management, and task automation. Participants will be encouraged to help one another and to apply what they have learned to their own research problems. The goal is to teach the practical knowledge needed to start programming, debugging and using R in everyday tasks. DETAILS & REGISTER

#### **Programming Workshop: Unix Shell, Version Control and Python**

#### 6, 13, 20 and 27 May, 12:00-4:00pm Atlantic

This is a beginner level series that is hands-on, covering the fundamentals of Python including data types, conditional statements, loops and functions, as well as program design, version control, data management, and task automation. Participants will be encouraged to help one another and to apply what they have learned to their own research problems. The goal is to teach the practical knowledge needed to start programming, debugging and using Python in everyday tasks. DETAILS & REGISTER

## Introduction to High Performance Computing (HPC) with ACENET & Compute Canada 11 May, 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**

#### 12 May, 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. <a href="DETAILS & REGISTER">DETAILS & REGISTER</a>

#### **Introduction to Shell Scripting**

#### 13 May, 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

#### 14 May, 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

#### **Parallel Computing School**

#### 17, 19, 31 May; 2, 7, 9, 14, 16, 21, 23, 28, 30 June, 2:00-4:00pm Atlantic

Topics include general parallel computing, Dask, Machine Learning, OpenMP programming, GPU accelerator programming, and Message Passing Interface (MPI) covered over 12 online sessions. Each two-hour session will include a lecture and learning exercises. These will be oriented to those learners seeking a more advanced experience. There will be online office hours each week so participants can ask questions about the course content and exercises. The course is aimed at researchers and innovators, both academic and industrial. The school is designed for participants familiar with the Linux command line and who have some level of programming experience. Completion of the ACENET Basics Series, or equivalent experience, is strongly recommended.

DETAILS & REGISTER

#### From Our Partners

The following workshops are being offered by our regional partners.

SHARCNET: Debugging Your Code with DDT, 21 April, 1:00-2:00pm Atlantic DETAILS & REGISTER

**SHARCNET: Introduction to Advanced Research Computing - Various Topics,** 8 February - 6 May, Mondays and Thursdays, 3:00-4:00pm Atlantic DETAILS & REGISTER

WestGrid: Bash Command Line, 27 April, 1:00-9:00pm Atlantic DETAILS & REGISTER

WestGrid: NVIDIA's IndeX and OptiX, 28 April, 2:00-3:00pm Atlantic DETAILS & REGISTER

Calcul Québec : Introduction à la ligne de commandes Unix, le 4 mai, 10h00-13h00 AH DÉTAILS ET S'INSCRIRE

WestGrid: Introduction to HPC, 4 May, 1:00-9:00pm Atlantic DETAILS & REGISTER

Calcul Québec : Premier pas sur les serveurs de calculs, le 5 mai, 10h00-13h00 AH DÉTAILS ET S'INSCRIRE

SHARCNET: Pandas Recipes for new Python Users, 5 May, 1:00-2:00pm Atlantic <u>DETAILS</u> & REGISTER

Calcul Québec : Introduction à la programmation avec Python, le 6 mai, 10h00-13h00 AH DÉTAILS ET S'INSCRIRE

Calcul Québec : Prétraitement des données avec OpenRefine, le 11 mai, 10h00-13h00 AH DÉTAILS ET S'INSCRIRE

WestGrid: Version Control with Git, 11 May, 1:00-9:00pm Atlantic DETAILS & REGISTER

Calcul Québec : Analyse de données et visualisation ave Python, le 12 mai, 10h00-13h00 AH DÉTAILS ET S'INSCRIRE

**WestGrid: Exploration of Tools and Approaches for Humanists,** 12 May, 2:00-3:00pm Atlantic <u>DETAILS & REGISTER</u>

Calcul Québec: Vectorization and Optimization, 18 May, 10:00am-1:00pm Atlantic <u>DETAILS</u> & REGISTER

WestGrid: Basics of Python, 18 May, 1:00-9:00pm Atlantic DETAILS & REGISTER

Calcul Québec : Analyse de données massives avec Spark, le 19 mai, 10h00-13h00 AH DÉTAILS ET S'INSCRIRE

**Calcul Québec : Programmation parallèle avec MPI,** le 20 mai, 10h00-13h00 AH <u>DÉTAILS ET S'INSCRIRE</u>

Calcul Québec : Programmation parallèle avec OpenMP, le 25 mai, 10h00-13h00 AH DÉTAILS ET S'INSCRIRE

WestGrid: Introductory Julia, 25 May, 1:00-9:00pm Atlantic DETAILS & REGISTER

**Calcul Québec: Introduction to GPU Programming with Python,** 26 May, 10:00am-1:00pm Atlantic <u>DETAILS & REGISTER</u>

WestGrid: Using Singularity Containers in VMs and HPC, 26 May, 2:00-3:00pm Atlantic <u>DETAILS</u> & <u>REGISTER</u>

**Calcul Québec : Programmation GPU avec OpenACC,** le 27 mai, 10h00-13h00 AH DÉTAILS ET S'INSCRIRE

WestGrid: Parallel Programming in Chapel, 1 June, 1:00-9:00pm Atlantic DETAILS & REGISTER

WestGrid: Parallel Programming in Julia, 8 June, 1:00-9:00pm Atlantic DETAILS & REGISTER

WestGrid: Introduction to Compute Canada Cloud, 22 June, 1:00-9:00pm Atlantic <u>DETAILS</u> & <u>REGISTER</u>

WestGrid: Docker, 29 June, 1:00-9:00pm Atlantic DETAILS & REGISTER

WestGrid: Machine Learning - Deep Learning with Fastai, 6 July, 1:00-9:00pm Atlantic DETAILS & REGISTER

WestGrid: Scientific Visualization with Paraview, 13 July, 1:00-9:00pm Atlantic DETAILS & REGISTER

WestGrid: Parallel Programming with MATLAB, 21 July, 1:00-9:00pm Atlantic DETAILS & REGISTER

WestGrid: Machine Learning & Deep Learning with MATLAB, 27 July, 1:00-9:00pm Atlantic DETAILS & REGISTER

#### Additional:

Training from our partner SciNet can be viewed here:



Women, Websites and Wikipedia: Accessible Digital Pedagogy and the Undergraduate Classroom

26 April, 4:00-5:00pm Atlantic, St. FX University (in-person)

How do you integrate meaningful DH pedagogy into a short, 13-week undergraduate semester? How can we, as educators, empower students to create and mediate digital content responsibly? What specific skills do students need, and what will they learn?

In this talk, Dr. Chelsea Gardner, Assistant

Professor of Ancient History at Acadia
University, addresses these questions through
the presentation of three case studies that
each introduce digital platforms into the
undergraduate classroom: Wikipedia
Education, Women in Antiquity, and Peopling
the Past. These platforms form the basis of
classroom assignments that aim to provide
students with skills that impart digital literacy
and contribute to impactful research through
the creation and improvement of globally
accessible, open-access

resources. **DETAILS** 



### New Digital Research Infrastructure Organization (NDRIO) Virtual Town Hall Series

These events are an opportunity for the research community to validate and provide further feedback on NDRIO's consultations to date as it relates to DRI usage, and the tools and services required to support research excellence.

The Virtual Town Halls are open to researchers in Canada from all disciplines, levels of engagement with DRI tools and research experience. Registration is required and is open until 30 April. Participation is limited to 150 people per session. Please reach out directly to NDRIO-NOIRN@engagedri.ca with questions or comments.

## Tuesday, May 4 - Theme: Awareness and Accessibility

English session: 2:00-3:00pm

Atlantic Register

French session: 4:00-5:00pm

Atlantic Register

## Wednesday, May 5 - Theme: Governance and Policy

English session: 2:00-3:00pm

Atlantic Register

French session: 11:30am-12:30pm

Atlantic Register

#### Thursday, May 6 - Theme: Operations

English session: 2:00-3:00pm

Atlantic Register

French session: 11:30am-12:30pm

Atlantic Register

Friday, May 7 - Theme: Support

English session: 2:00-3:00pm

Atlantic Register

French session: 11:30am-12:30pm

Atlantic Register



# 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. There
will be no session in April due to the <u>Digital</u>
<u>Humanities Summer Institute - East</u>. The next
Tools of the Trade session will be **May**28th on *Cloud and ArcGIS*, with Josh
Macfadyen, Canada Research Chair in
Geospatial Humanities.

Tools of the Trade focuses on discussions, demonstrations and applications of digital research tools in humanities, arts and the social sciences. Open to anyone interested in digital research tools for the humanities, arts and social sciences. To receive notices and information about the series and sessions, sign up here



# PEI Red Dirt Digital Tools Forum

The next session of Red Dirt will be **May 14th.** Join our research consultant on the Island, Mat Larade, with guest **Xander Wang** of UPEI's School of Climate Change and Adaptation.

Red Dirt is an informal and participant driven forum to ask questions, discuss challenges and learn about new digital research tools for faculty, research staff, students and industry across all disciplines and experience levels. Meet others doing computational modelling, data mining, parallel computing, machine learning, creating web platforms and cloudbased shared analysis workspaces, or the myriad of other digital tool applications! To receive notices and information for these sessions, sign up here

