



# ACENET

*accelerate discovery*

## PEI Red Dirt Digital Tools Forum

The next session of Red Dirt will be **April 9th**,  
Join our research consultant on the Island, Mat  
Larade, with guest **Jason Pearson of UPEI** to  
talk about the ins and outs of **machine  
learning**.

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 cloud-based shared analysis workspaces, or the myriad of other digital tool applications! To receive notices and information for these sessions, sign up [here](#)

## Upcoming Training

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

### **Modern Fortran for Scientific Programming**

***1 April, 12:00-4:00pm Atlantic***

This workshop will be a hands-on introduction to the FORTRAN programming language. FORTRAN, one of the initial high-level programming languages, continues to be an excellent option for high-performance computing due to its superb performance. The newer versions of FORTRAN offer many modern features, including object-oriented programming capabilities to programmers. This course will cover some of these features. Participants must be familiar with another programming language. [DETAILS & REGISTER](#)

### **Molecular Dynamics Workshop**

***6, 13, 20 and 27 April, 1:30-3:30pm Atlantic***

This workshop is designed to be a practical introduction to the method of molecular dynamics simulations. It is intended for students with no prior knowledge. Students will be guided to using various structure prediction software to model missing protein and RNA segments, AMBER and NAMD software for performing simulations of biomolecular systems, VMD for visualizing trajectories and manipulating PDB files, and Python for analyzing and plotting simulation data. The workshop will be conducted in four two-hour hands-on sessions over two weeks, consisting of molecular dynamics basics, visual molecular dynamics, building complex simulation systems and molecular dynamics simulation and analysis. [DETAILS & REGISTER](#)

### **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. [DETAILS & REGISTER](#)

### **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](#)

### **From Our Partners**

The following workshops are being offered by our regional partners.

**Calcul Québec: Introduction to Version Control with Git**, 31 March, 10:00am-1:00pm

Atlantic [DETAILS & REGISTER](#)

**WestGrid: Exploring the State of a Slurm Cluster**, 31 March, 2:00-3:00pm Atlantic [DETAILS](#)

[& REGISTER](#)

**Calcul Québec : Analyse de données avec Python**, le 6 avril, 10h00-13h00 AH

[DÉTAILS ET S'INSCRIRE](#)

**SHARCNET: An Update on ADF/AMS Software on Graham**, 7 April, 1:00-2:00pm Atlantic [DETAILS](#)

[& REGISTER](#)

**Calcul Québec: Data Analysis and Visualization in Python**, 8 April, 10:00am-1:00pm

Atlantic [DETAILS & REGISTER](#)

**WestGrid: Introduction to Using Fastai**, 14 April, 2:00-3:00pm Atlantic [DETAILS & REGISTER](#)

**WestGrid: Introduction to Python**, 15-16 April, All day [DETAILS & REGISTER](#)

**SHARCNET: Debugging Your Code with DDT**, 21 April, 1:00-2:00pm Atlantic [DETAILS & REGISTER](#)

**WestGrid: NVIDIA's IndeX and OptiX**, 28 April, 2:00-3:00pm Atlantic [DETAILS & REGISTER](#)

**WestGrid: Exploration of Tools and Approaches for Humanists**, 12 May, 2:00-3:00pm  
Atlantic [DETAILS & REGISTER](#)

**WestGrid: Using Singularity Containers in VMs and HPC**, 26 May, 2:00-3:00pm Atlantic [DETAILS  
& REGISTER](#)

**Additional:**

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