SPRING 2018
RESEARCH COMPUTING WORKSHOPS

INTEL SKYLAKE WORKSHOP
FEBRUARY 14-15
Intel engineers J.D. Patel and Kevin O’Leary demonstrate tools and best coding practices to get the most performance out of the new Intel processors.

DATA TRANSFER BASICS AND GLOBUS TRANSFER TOOL TUTORIAL
FEBRUARY 16 | 2:00 - 4:00 pm
Hyjoon Kim, Cyberinfrastructure Engineer, teaches advanced networking and data transfer practices.

INTRO TO PROGRAMMING USING PYTHON
March 7 | 2:00 - 3:30 pm
Matthew Cahn, Lecturer & Systems Administrator for Biology, There are four different sections. Participants sign up for one of the sections; each section meets twice. All sessions are 3:30 - 5:00 pm
Section I: 2/20 & 2/27
Section II: 2/21 & 2/28
Section III: 2/22 & 3/1
Section IV: 2/23 & 3/2

PYTHON PROGRAMMING TECHNIQUES
MARCH 7 | 2:00 - 3:30 pm
Eliot Feibush, Visualization Scientist teaches elements and features of Python and how it can be used within a workflow.

FUNDAMENTALS OF PERFORMANCE TUNING FOR PYTHON APPLICATIONS
MARCH 14 | 11:00 am - 5:00 pm
Alexey Svyatkovskiy, Big Data Software and Programming Analyst, teaches ways to make Python applications run faster and learn how to use tools like Numpy, Cython and Tensorflow.

GETTING STARTED WITH HPC SYSTEMS AND INTRO TO THE BASH COMMAND-LINE
MARCH 15 | 2:00 - 4:30 pm
Ben Hicks, Research Software and Programming Analyst, leads this basic primer on how to get started with HPC Systems and the Bash Command-Line.

INTRO TO PARALLEL PROGRAMMING
MARCH 21 | 10:00 am - 3:00 pm | March 22 | 9:30 am - 2:00 pm
Ian Cosden, Manager of HPC Software Engineering and Performance Tuning, teaches this two-day hands-on tutorial on parallel programming using MPI and OpenMP.

USING R ON HPC CLUSTERS
APRIL 3 | 2:00 - 3:30 pm
Bill Guthe and Ben Hicks provide an overview of techniques for using R to tackle problems at scale and in parallel on Princeton’s HPC clusters.

INTRO TO VERSION CONTROL WITH GIT & GITHUB
APRIL 4 | 10:00 am - 4:00 pm
David Luet, Software and Programming Analyst, teaches the fundamentals of Version Control with Git & GitHub.

INTRO TO DEBUGGING WITH THE DDT ADVANCED DEBUGGER
APRIL 17 | 2:00 - 4:00 pm
Stéphane Ethier, Computational Physicist, teaches debugging and parallel programming with MPI and OpenMP on multicore processors, including Graphical Processing Units (GPUs).

MATLAB PROFILING AND OPTIMIZATION
APRIL 30 | 1:00 - 3:00 pm

SCIENTIFIC VISUALIZATION
MAY 2 | 2:00 - 3:30 pm
Eliot Feibush, Visualization Scientist, teaches scientific visualization techniques in the VisIt software package.

GEOREGRAPHIC INFORMATION SYSTEM (GIS) WORKSHOPS
William Guthe, Senior GIS Visualization Analyst
Wangyal Shawa, Geographic Information Systems Librarian
To register for GIS courses:
library.princeton.edu/collections/pumagic/workshops

To register: www.princeton.edu/training
More Info: www.princeton.edu/researchcomputing/events/