CIRC Workshop Spring 2025
Friday, April 25, 2025 – 10:00 am to 3:30 pm
Location: VISTA Collaboratory (1ˢᵗ Floor Carlson Library)

Session 1 - Prerequisites (10:00 a.m. - 10:30 a.m.)
- NetID vs. Active Directory (AD) authentication
- Two-factor authentication (Duo)
- On-campus vs. off-campus connectivity
- CIRC account requests and process

Session 2 - Overview of BlueHive and CIRC Environment (10:30 a.m. - 11:00 a.m.)
- Overview of the BlueHive computing environment
- Connecting to BlueHive and CIRC services (Terminals and Graphical User Interfaces)
- Clustered computing and sharing resources
- Login node vs. compute node
- Info.CIRC

Session 3 - Introduction to Linux (11:00 a.m. – 12:00 p.m.)
- Beginner's introduction to Linux and the command line environment
- Basic Linux commands
- How to navigate files and directories
- Techniques for viewing and editing files
- How to transfer, copy, and share files

Session 4 - Slurm Resource Management and Running Jobs on BlueHive (12:30 p.m. - 1:30 p.m.)
- How to submit and run jobs interactively and in batch mode on BlueHive
- Slurm commands
- Setup of Slurm scripts
- Running jobs in parallel
- Best practices for using BlueHive

Session 5 - Modules and Software (1:30 p.m. - 2:00 p.m.)
- Available software on BlueHive
- Modules environment for configuring and using software
- Python environments

Session 6 - Remote Visualization (2:00 p.m. - 2:30 p.m.)
- Basic aspects of display forwarding
- FastX and VirtualGL
- VISTA Collaboratory

Session 7 - Introduction to Jupyter (2:30 p.m. – 3:00 p.m.)
- What is Jupyter?
- Interactive notebooks: Python, R, and Spark
- Running Jupyter on BlueHive

Session 8 - Introduction to Gitlab (3:00 p.m. – 3:30 p.m.)
- Software hosting and distribution environments
- Version control system for managing software development
- GitLab in the CIRC environment