**Intro to Distributed Memory**

**Parallel Computing with MPI**

NCSA Research Facilitation Services Workshop

**Linux Commands Sheet**

* **cat:** outputs the content of a text file

cat <FileName>

* **cd:** changes directory

cd <PathToTargetDirectory>

* **cp:** copies a file from one location to the other

cp <PathToFile> <PathToFileCopy>

* **ls:** lists files and folders in the current directory
* **pwd:** outputs the path to the current directory
* **mkdir:** creates a new directory

mkdir <NameOfNewDirectory>

* **make:** runs script in Makefile, usually for compilation
* **mv:** moves a file from one place to another

mv <PathToFile> <PathToNewFileLocation>

* **rm:** removes a file

rm <PathToFile>

* **sbatch:** sends a job to the batch scheduler

sbatch <PathToJobScript>

* **scancel:** cancels a job that has been sent to the scheduler

scancel <JobID>

* **scp:** copies a file from the remote server to your local machine

scp <YourUserName>@cc-xfer.campuscluster.illinois.edu:<PathToFile> <FileDestination>

* **ssh:** connects to a remote server

Ssh <YourUserName>@cc-login.campuscluster.illinois.edu

* **squeue:** outputs information about the batch scheduler
  + squeue -u $USER
    - Information about each one of your jobs
  + squeue -p <PartitionName>
    - Information about jobs in a certain partition
  + squeue -j <JobID>
    - Information about a particular job
* **git clone:** clones a repository from GitHub (copies it and starts version control)
  + git clone <RepoURL>
* **git pull:** makes sure a cloned repo is up-to-date with its source
  + git pull