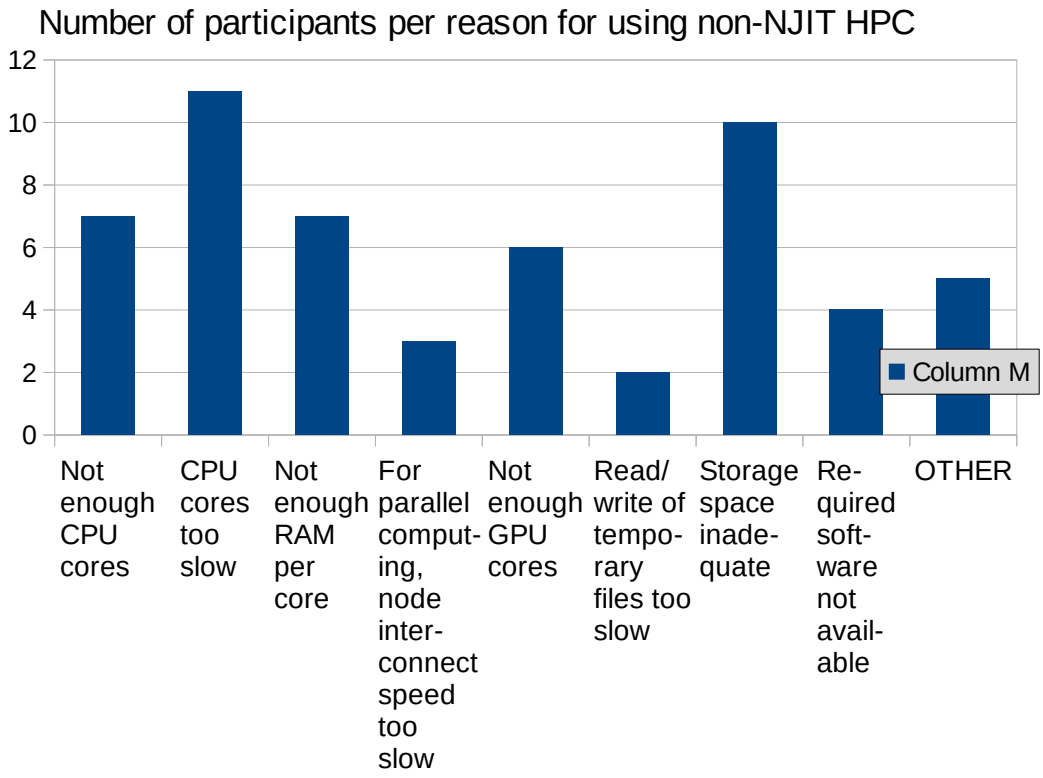
Use of non-NJIT resources

21 Participants

Participants were asked whether they used non-NJIT HPC resources, and if so, to list those resources and indicate reasons for their use from a provided list and (optionally) by written description as well. 21 out of the 53 (40%) of participants in the HPC resources topic section indicated that they used HPC resources outside of NJIT.

Participants' choices of reasons are shown in the graph below. The specified non-NJIT resources, along with the reasons for their use, are shown in the subsequent table. Each table row represents responses from a single participant. Hence, resources specified by more than one participant are listed more than once were.



REASONS →	Not enough CPU cores	CPU cores too slow	Not enough RAM per core	For parallel computing, node interconnect speed too slow	Not enough GPU cores	Read/write of temporary files too slow	Storage space inadequate	Required software not available	OTHER
% CHOOSING the REASON →	33%	52%	33%	14%	29%	10%	48%	19%	24%
OUTSIDE									

RESOURCE									
Xcede		x							
Xsede		x							
Xsede supplementary computation	x	x	x	x	x				
Compute Canada, Xsede		x		x					
Amazon Webservice. Google cloud platform		x	x		x		x		
AWS & GCP			x	x		x	x	x	
GPU station with 4 TitanXp GPUs, purchased by professor					x				
lab	x	x							
NFS computer, DOE & Navy computers	x		x				x	x	
NASA Pleides supercomputer							x		
Resources at NYU									x
TACC					x		x		x
CIPRES portal							x		x
Workstation and other universities with better support	x	x	x		x		x	x	
Rutgers Conley3 and Amarel							x		
8-core 4.0Ghz, high performance GPU 2GB workstation		x							
Stanford HPC system, Barcelona Supercomputing Center									x
UIUC cluster	x	x	x				x		x

machine									
HPC from UPenn							x	x	
unspecified	x	x			x	x			
Unspecified, provided by collaborators	x	x	x						

The table below lists the written descriptions for *OTHER* and for *Additional comments*.

OUTSIDE RESOURCE	Reasons: OTHER	ADDITIONAL COMMENTS
Xsede		Because I'm facing a problem in which my jobs got killed without any reason but thats sure its due to problem in cluster and when I contact the ARCS, they said they are not able to identify the problem.
Xsede supplementary computation		NJIT HPC computational resources are not adequate for the amount of research we perform in our group.
AWS & GCP		data transfer between node and disk to memory and temp space for bd task is not enough. for data science, we don't have the latest version of lib and also I couldn't find cuDNN lib for tensorflow to run the deep learning into GPU. I believe, we may have to improve hpc/bd resources for deep learning for both parallel and serial in terms of lib, driver, development and testing environment
lab		Easier access. Response time.
NFS computer, DOE & Navy computers	some software is just too expensive for the university to consider for one or two users only - so use if can find on nsf or dod computer x	
NASA Pleides supercomputer		For Kong head node, the 1 GB quota is too small
Resources at NYU	More experiments can be run :)	Team is made up of NYU and NJIT students/faculty. Therefore, it is easy for us to use both clusters to run our experiments.
TACC	Inadequate support	Inadequate support and not to up-to-date documentation
Stanford HPC system, Barcelona Supercomputing Center	I am still completing some work on those machines.	I will be using those only until I am done with some old computation. I will switch to NJIT resources very soon, though.
UIUC cluster	GLIBC is too old on stheno	For Kong, I was attempting to install miniconda and

machine		work on specific project in Python. Unfortunately, the storage for each user is just 5GB and it is totally not enough for a student user who has need in large computation. For stheno, the GLIBC version is way too old (2.5) and it should have up-to-date version for users.