

# End user support / People helping people

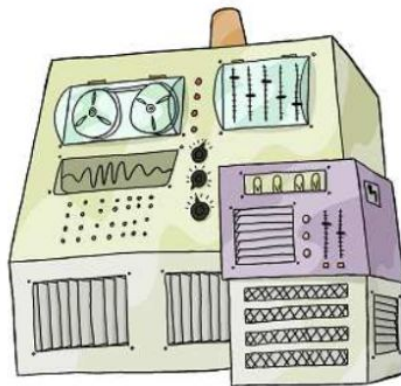
why it's important  
what's involved

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(Clemson CITI, Software Carpentry, ACI-REF, CC)







Your account has been added to Palmetto. Welcome, and please refer to our User's Guide to get started:

<http://www.palmetto.clemson.edu/>

We offer regular workshops on using Palmetto cluster. For the schedule of upcoming classes, refer to our training schedule here:

<http://citi.clemson.edu/training>

For new users of Palmetto cluster, we offer Palmetto on-boarding sessions every Friday morning from 9:00 to 10:00 AM in Barre Hall, room 2138. Our research support staff is available to help you get started with using Palmetto, and to discuss how to use Palmetto for your specific research needs. No appointment is necessary, just drop by.

In addition, we offer Palmetto Office Hours for all Palmetto users every Wednesday morning from 8:00 to 11:00 AM in Barre Hall, room 2108. No appointment is necessary, just drop by.

Finally, if you publish papers based on using Palmetto, please be sure to include an acknowledgement. An example acknowledgement can be found in the User Guide.



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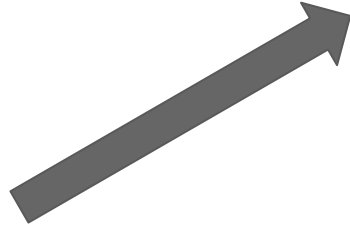
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1. Contact with human **before** contact with technology





I am trying to run a simulation in R and I have recently joined Palmetto. I tried running simulation earlier, and as of now, it is no faster than my personal computer.

I might not be correctly specifying the number of cores to use, storage and all of that.



Would it be possible to get some help with installing the latest version of LAMMPS with GPU acceleration on Palmetto?

I am able to make a simple MPI build but I am sure I am not optimizing for Palmetto hardware at all and I am not currently taking advantage of the GPUs.



I would like to use  
tensorflow on palmetto.



2. User interactions are about **solutions**, not problems



I can't...

I want to...

I'm working on...



Interesting...

Hmm, that's new.

Let me see if I can...

3. Lots of knowledge is transferred both ways





# Consultation

- Weekly office hours
- Weekly new-user meetings
- Tickets
- E-mail
- Meetings at research labs
- Appointments

# Consultation

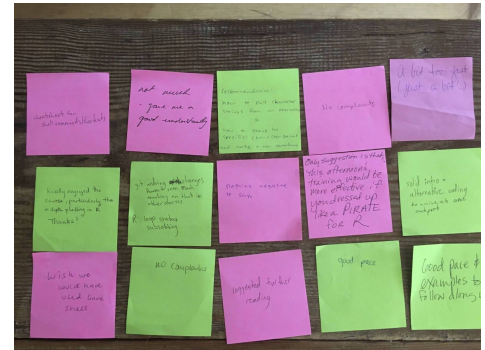
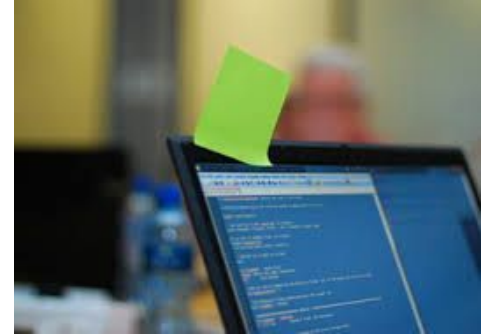
- Learning researcher requirements
- Making researchers aware of what's available
  - Institution resources (Palmetto, Cypress cluster)
  - National resources (OSG, XSEDE, CloudLab)
  - JupyterHub
  - Their own laptops or workstations
- Helping users get started with the resource
  - Port software and workflow
  - Submit their first job
- Improving workflows
  - How do I move data faster?
  - How do I do more computing?
- Troubleshooting issues

# Training

- Monthly workshops on Linux+Cluster usage
- Regular Software Carpentry workshops
- Workshops on
  - Programming
  - OSG
  - Visualization, GIS, other topics
- Online materials

# Training

- Human interaction essential for novice users
- Self-paced, online documentation works better for intermediate and advanced users
- Short, intensive workshop format works well
- Software and Data Carpentry
- HPC Carpentry? (NSF proposal led by Christina Koch and with Dana Brunson)



# Best Practices

[http://aci-ref.github.io/facilitation\\_best\\_practices/](http://aci-ref.github.io/facilitation_best_practices/)

- Getting established as a “Research Computing Facilitator”
- Outreach
- Engagement with researchers
- Implementing an “ACI Plan”
- Assisting researchers in the use of ACI resources
- Education and training of researchers
- Enhancing ACI knowledge
- Facilitating researcher connections
- Self-assessment and user metrics

# Resources

<http://aci-ref.org/>

CC mailing list and XSEDE website

software-carpentry.org