Research Computing and Data Resources at Duke

https://rc.duke.edu/ - Starting point for University-provided Research Computing and Data (RCD) resources

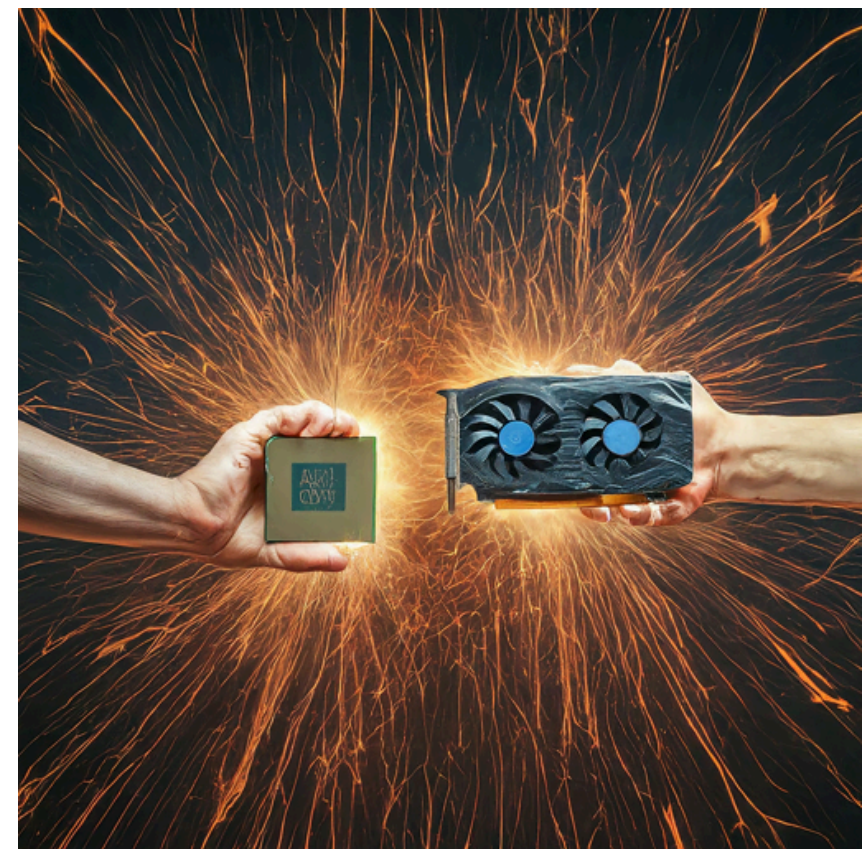OITResearchSupport@duke.edu - they want to help! (and they are super knowledgable)

tts-sciencehelp@duke.edu - us! We can help you learn about and use resources available at the Department, College, and University levels

Computing Options

Duke Compute Cluster

https://dcc.duke.edu/

- 40k+ compute cores
- 930 GPUs for computing
- Job scheduling with SLURM

Computing Options (Cont'd)

RAPID VMs

- a.k.a. Research Toolkits VM
- No cost to Duke faculty
- Simple to set up and replace as needed
- Allocation: 4 CPU cores, 40GB of memory, 200GB storage
- Can be divvied up or combined with those of a willing colleague

Computing Options (Cont'd)

VCM (Free)

https://vcm.duke.edu/

- Virtual Machines with different applications pre-installed
- Containers for RStudio, etc.
- Course-specific containers

Research VMs (Non-Free)

- Pay for the resources your project needs for as long as (and *only* as long as) you need them.

Protected Network (PN) for Research

https://oit.duke.edu/service/protected-network-research/

- Safe for Sensitive Data

Storage Options

Data Commons Storage (Free + Paid-for)

- "Free" is accessible only within the DCC

- "Paid" is accessible from anywhere on Duke's network

Moving Data with Globus

https://dcc.duke.edu/globus/

- Data manager to move or share large datasets

- Can be used with any OIT-provided research storage

Trinity Research Storage

tts-sciencehelp@duke.edu

- Free for up to a few 10s of TB (at least)

Storage Options (Cont'd)

Dropbox (the envy of the University!)

- Only available for Biology faculty, staff (including postdocs), and graduate students
- As you affilate with a lab, they will provide you with guidance on access and usage

Software Resources

Site License Office

https://software.duke.edu/
(ChemDraw, Lasergene, GraphPad Prism, MATLAB, Mathematica, etc.)

Biorender Premium License (administered by TTS)

tts-sciencehelp@duke.edu

Duke VPN

When off campus, connecting to the Duke VPN is necessary for many of these resources
https://vpn.duke.edu/
OR
Cisco AnyConnect on https://software.duke.edu/

Center for Data and Visualization Sciences

https://library.duke.edu/data

- Data Sources

- Data Management

- Data Science

- Data Visualization

- Mapping & GIS

Innovation Co-Lab

https://colab.duke.edu/

- Workshops (Co-Lab Roots)
  - Linux and Bash command line
  - Web technologies
- Makerspace
- 3D printing

Compute and Data Services Alliance for Research

https://research.duke.edu/CDSA <-- Watch this space!

Collaboration of OIT, DUL, and ORI anticipates providing:

- More no-cost resources, including expertise and services

- Rapid support response

- Easier access to helpful information

- Competitive services to attract and retain research talent

- Smoother access to services

Summary

- tts-sciencehelp@duke.edu (always a good first stop!)

- OITResearchSupport@duke.edu