Introducing the newest academic resource at UTPB, **Nitrous**. Nitrous is a High-Performance Computing (HPC) cluster dedicated to advancing scientific research and providing researchers with a distributed system to utilize in their academic pursuits.

**General Overview**

Nodes: 7 compute nodes, 1 login node, 1 head node

Processor: Intel(R) Xeon(R) Gold 6326 CPU @ 2.90GHz

Cores Per Node: 32 cores compute, 16 cores head and login

RAM Per Node: 250 GiB

Storage Capacity: Home: 1.75Tb SSD, Data: 27.5Tb HDD

Network Topology: Ethernet

Data Transfer Rate: 10 Gb/s (25 Gb/s coming soon)

**Software & Libraries**

Operating System: Rocky OS

Supported Languages: C, C++, Fortran, Python, R, Rust

Additional Software: Apptainer, Jupyterhub

**Access and Security**

Remote Access: SSH, Jupyter VNC

Security: Active Directory integration for SSO (Single Sign-On) and Multi-Authentication

**User Support & Training**

Support: UTPB Cluster Admins via GLPI ticketing system and UTPB training

If you would like to use this resource, create a ticket and ask for HPC access using the following link: <https://glpi.utpb.edu/front/helpdesk.public.php?create_ticket=1> or contact Matthew Fuller at [fuller\_m@utpb.edu](mailto:fuller_m@utpb.edu).