

RITS

New Opportunities

Cloud and Autonomic Computing Center



In October 2018, UNT joined the NSF IUCRC Cloud and Autonomic Computing Center as an affiliate site.

The IUCRC program provides unique industry-research partnership opportunities leading to creating an industry savvy workforce to benefit the U.S. economy.

This new affiliation facilitates new collaborative opportunities with other CAC-member sites, their industry partners, federal grant opportunities accessible to IUCRC programs, and industry-research partnerships accessible through the Dallas-Fort Worth's industry ecosystem.

Toward strategic enablement across STEM and non-STEM research capacities, UNT is proposing a new NSF CAC site on Integrated Modeling and Analytics in the Cloud. **Please come join us!**

The ASSUR²E Program: Application Support Services for User Recruitment and Retention

Are you looking for help computerizing your IP?

If you are not sure how to leverage RITS capabilities for your research needs and you have students who need to be trained in specialized IT areas for enabling your research, **ASSUR²E is for you!**

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DSA

Data Science and Analytics

Adding machine learning to your research!

Data analysis is a strength at UNT that parallels non-STEM expertise with more than 32,000 students enrolled in colleges that are not STEM-based. Emerging applications are pushing to integrate high-performance computing with data-intensive analytics. UNT is one of the first universities in the nation to co-host high-performance computing and data science and analytics in one office.

The main purpose of Data Science and Analytics, formerly called Research and Statistical Support, is to help faculty, students and staff achieve their research and training goals using innovative information technology tools and statistical analyses. Users can leverage current and emerging programming and analytics environments in machine learning, artificial intelligence, and potentially neuromorphic computing technologies, with the tools and expertise of our team.

Improved research efforts strategically will help align UNT's research priorities through the convergence of HPC and DSA.

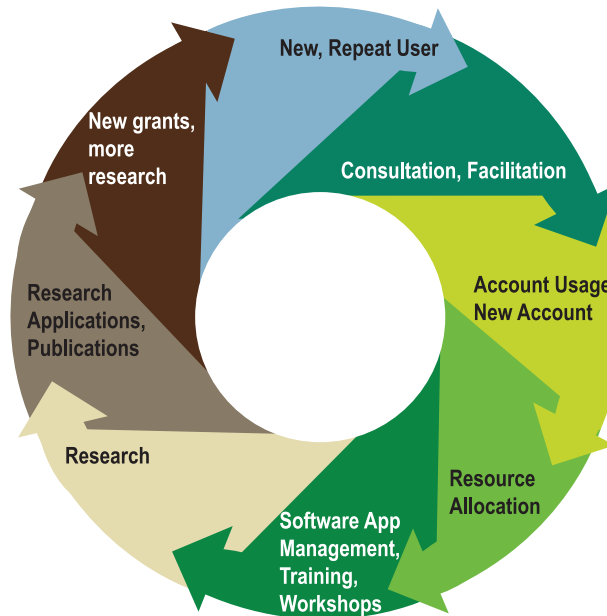
DSA Services

- Consulting;
- Application support services;
- Instructional support: short courses, tutorials;
- Data support;
- Survey support;
- Grant collaborations and student mentoring;
- Index of articles.

DSA has been helping faculty, students and administrators since the early 1980s.

Talon

UNT's flagship computing system



In 2017-18, the Talon 3 high-performance computing system served a record 50 million CPU-core hours of computation for diverse researchers at UNT. This record amount of activity eclipsed the previous high-utilization mark of 31 million CPU-core hours in FY2014. In FY 2018, Talon 3 provided services to 354 users from 74 research groups spanning across 18 departments.

In FY 2018, UNT generated \$7.6 return on investment for every dollar spent on Research IT Services. The national average is about \$10 to \$1. Your participation will improve UNT's ROI and potentially, your research as well.

Research IT Services, ASSUR²E & equipment are funded and supported by:

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FINANCE &
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HPC

High-Performance Computing

Grow your IP through Supercomputing!

It's your intellectual property—let's kick it up a teraflop! UNT's High-Performance Computing team can efficiently, reliably and quickly help researchers solve complex computational problems by using parallel processing to run advanced application programs.

HPC technology focuses on developing parallel processing algorithms and systems by incorporating both administration and parallel computational techniques. In other words, Talon does more, faster.

Instead of using your single, desktop computer, you can use Talon's scientific software on a network of nodes for problems that are either too large for standard computers or would take too long.

Programs on HPC systems create a vast amount of data that can be very difficult for standard file systems and storage hardware to deal with. Standard file systems, or those defined for personal use, might have an upper limit on file size, number of files or total storage. HPC also offers storage that removes these limitations.

HPC Services

- Installing, monitoring and maintaining the Talon HPC cluster hardware and software;
- Providing end-user support for issues regarding interfacing with the cluster components;
- Installing research computing software optimized for parallel HPC environment;
- Grant collaborations and student mentoring;
- Consultations on research-computing best practices.