

Research Computing is dedicated to enabling research, accelerating discovery, and spurring innovation at Arizona State University through the application of advanced computational resources to grand challenges in science, engineering, and health. Offering a team of systems professionals, architects, scientific software engineers, and research facilitators, [ASU Research Computing](#) provides technical expertise in all areas of computing, including parallel computing, big data analytics, scientific visualization, high-speed networking, and cybersecurity.

Advanced Computing and Data Resources

- Over 35,000 CPU cores and over 580 GPU accelerators across two supercomputers
- 10PB research data storage platform for project-term data
- Dedicated virtual machines for specific research environments, and
- A FISMA high secure computing environment managed by a HIPAA Covered Entity, supporting computational research on sensitive data
- [Full service descriptions and rates are available here](#)

Proposal Support

Customized proposal support is available to all researchers, including data management plans, facilities statements, letters of support, and hardware quotes. [Contact us for a personal consultation.](#)

Training and Workshops

Annually, Research Computing's [Carpentries-certified](#) instructors offer more than a dozen distinct and free [technical workshops](#) geared toward every level of user – from beginner to intermediate – including an Introduction to GPU training, a four-part Python series, and an overview of managing large data with Globus.

Software

ASU Research Computing supports over 1,200 software modules representing over 500 applications, including over 130 Python environments. Popular software applications include:

- MATLAB
- Python—and Jupyter interface— including tensorflow, numpy, scipy and pandas
- R—and RStudio interface—including many packages such as tidyverse and bioinformatics tools and other statistical packages such as sas and stata
- Domain-specific packages, such as LAMMPS, WRF, GATK, Rosetta and Gromacs
- GPU-accelerated bioinformatics (Nvidia Parabricks) and protein structure (AlphaFold) packages; python libraries accelerated for GPU in Nvidia RAPIDS



Browser-Based Interactive Computing Environment

Accessing Research Computing resources has never been easier than with our browser-based interactive computing web portal. By logging in through the web portal, using your ASURITE login and password, you can manage file systems, create and monitor jobs, view and manage interactive sessions, and so much more!

Contact

To schedule a consultation with our staff, please visit [this page](#).