

# Research Computing

## High Performance Computing Support

**The Research Computing Support Group** at UTSA provides computing, data storage and visualization resources to support research that has specialized or highly intensive computation needs. Typical applications include statistics, data analysis, molecular modeling, scientific and engineering simulation and visualization.

**Shamu** A centrally shared High Performance Compute (HPC) cluster used to run engineering, mathematic and research applications. **Shamu** has many different software applications available including: MATLAB, ParaView, VisIt, Visualization Toolkit (VTK), Octave, JAVA and Mathematica.

**Shamu** is comprised of:

- 83 physical servers.
- 5080 total CPU cores.
- TFlops: 154.58
- 28 TB of shared memory.
- Dell Compellent highly fault tolerant storage array with 150 TB of shared disk storage.
- 4 GPU nodes, 2 containing 4x NVidia Tesla K80 GPU cards, 2 with 4x V100 cards.
- 1 node with 72 cores (E7-8800v4 XEON processor) and 1.5 TB RAM.

**VizLab** Showcase your research, presentations or photos on the lab's visualization wall. Users can also use the **VizWall** for a teleconference or to showcase art.

**VizWall** features:

- 24 high-definition 32" monitors.
- 14.4 feet wide and 6 feet tall.
- Surround sound.
- 115 million pixels versus 2 million on a 1080P TV.

### HTC Vive, Oculus Rift, Oculus Rift Go, and Microsoft HoloLens

Discover virtual and augmented reality with different educational apps on the lab's multiple headsets. Use the **HTC Vive** or **Oculus Rift** to see how blood cells function in the human body or study geography with Google Earth. We offer virtual reality apps for all majors!

**85" 3D stereoscopic TV display**

**High-End Computer Workstations and iMac Pro**



## Contact Information:

**Contact us** to schedule VizLab space for private research, class meetings, tours and workshops

**Visit our website today to request a Shamu account!**

Website: [utsa.edu/oit/RCSG](http://utsa.edu/oit/RCSG)

Email: [RCSG@utsa.edu](mailto:RCSG@utsa.edu)

Phone: **210-458-8552**

Location: **MS 1.03.06N**

**Service Hours of Operation**

Monday - Friday **8 a.m. - 5 p.m.**

**Available to the UTSA community at no cost.**