



MISSISSIPPI STATE
UNIVERSITY™

CENTER FOR ADVANCED
VEHICULAR SYSTEMS

CAVS is an interdisciplinary center comprised of engineering, research, development, and technology transfer teams focused on enhancing human and payload mobility.

High Performance Computing



**MISSISSIPPI STATE
UNIVERSITY™**

**CENTER FOR ADVANCED
VEHICULAR SYSTEMS**

Advanced Vehicle Systems

**CAR OF THE
FUTURE**

Additive Manufacturing



Lightweight High Strength Materials

Computing & Storage Resources

- High Performance Computing (HPC) systems
 - Shadow: Cray CS300-LC
 - 593 TeraFLOPS (Trillion Floating Point Ops. Per Sec.)
 - 4800 processors; 28,800 co-processors (Xeon Phi)
 - 72 TB of core RAM; 4TB of co-processor RAM
 - FDR Infiniband (56 Gbps)
 - Direct warm water cooling
 - Talon: IBM iDataPlex
 - 34.4 TeraFLOPS
 - 3072 processors; 6 TB of RAM
 - QDR Infiniband (40 Gbps)
 - Raptor: Sun X2200m2 Cluster
 - 10.6 TeraFLOPS
 - 2048 processors; 4 TB of RAM
 - 10Gig/1Gig Ethernet
- Storage
 - 4 Petabytes (PB) of high-speed disk storage
 - 9 Petabytes (PB) of near-line tape storage

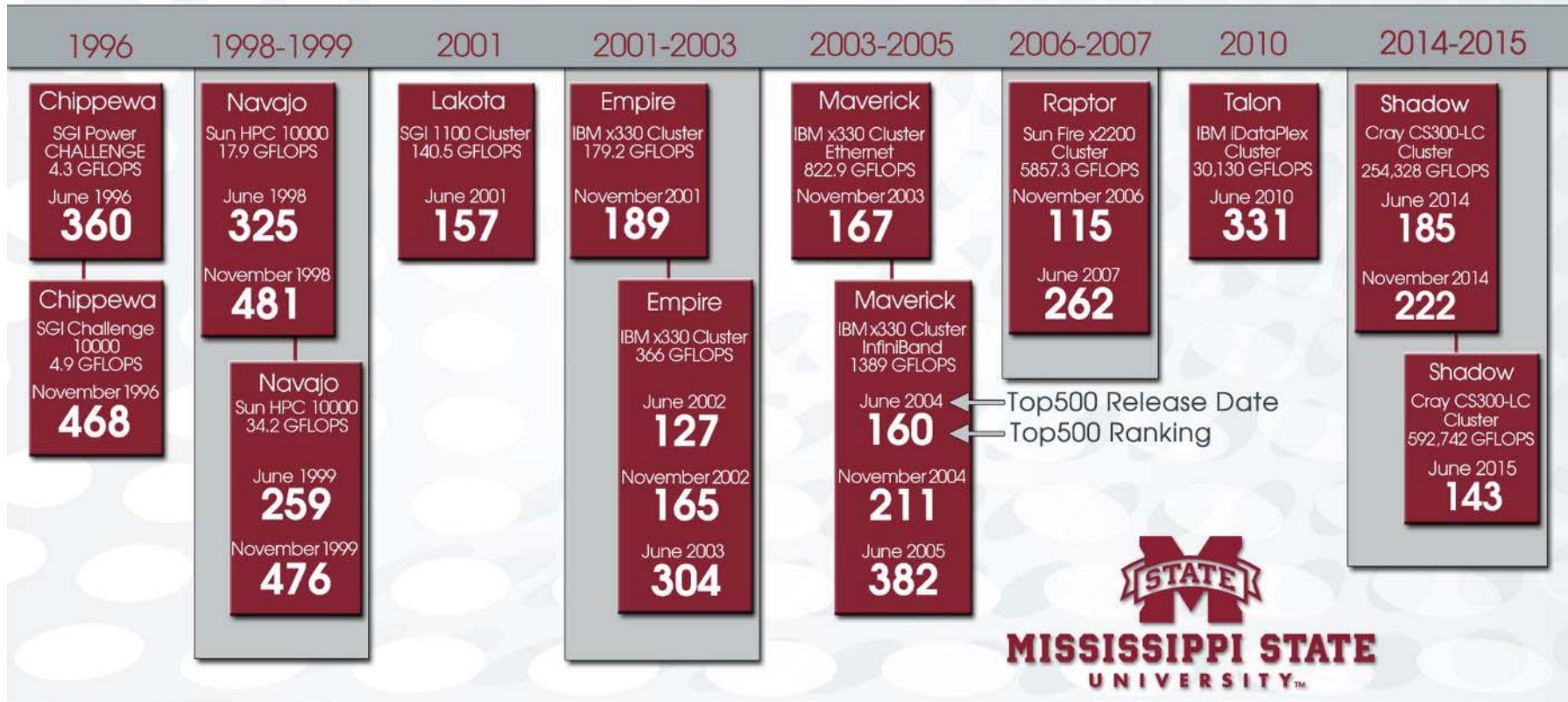


TOP500 History at MSU



Historical Trend of Top500 Ranking High Performance Computing Collaboratory

Release Dates with Rankings by www.Top500.org



State Focus, Regional Asset Vehicle Cluster



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www.cavs.msstate.edu