

Georgia Tech, Oak Ridge and UT-Battelle collaborate on high-performance computing

February 1 2006

The College of Computing at Georgia Tech, Oak Ridge National Laboratory and UT-Battelle today announced a wide-ranging collaborative agreement to share facilities, staff and scientific resources aimed at significantly increasing the United States' capability to carry out large-scale research efforts reliant on advanced supercomputing technology.

This unique, public-private collaboration will position the Southeastern United States as a national destination for high-performance computing research and development.

"The College of Computing at Georgia Tech was created to make it easier to partner with leading research centers and academic institutions and to elevate computer science research and education on a national and global scale," said Richard A. DeMillo, dean of the College of Computing at Georgia Tech. "We firmly believe that this partnership with ORNL and UT-Battelle will create a one-of-a-kind environment for high-performance computing research and help reinvigorate U.S. capabilities in supercomputing."

As part of the agreement, Dr. Thomas Zacharia, associate laboratory director for ORNL's Computing and Computational Sciences Directorate, will be appointed as a professor in Georgia Tech's College of Computing, a national leader in education and research that creates real-world computing breakthroughs to drive social and scientific progress. Subsequent joint appointments of faculty and staff, as well as

an ongoing distribution of research students and computing resources, will follow in the coming months. In addition, with support from UT-Battelle, the non-profit partnership between the University of Tennessee and Battelle charged with managing ORNL operations, CoC's Computational Science and Engineering (CSE) Division will open a campus at ORNL dedicated to advanced computational science and engineering research and graduate education.

"This agreement represents a milestone for Oak Ridge National Laboratory," said Director Jeff Wadsworth. "This creative partnership will bring closer together the extraordinary computational capabilities of both Georgia Tech and ORNL. Together, the partnership will represent one of the world's greatest resources for high-performance computing."

The CoC-ORNL-UT-Battelle partnership will further the development of various scientific breakthroughs that are heavily-dependant on access to the highest levels of computational resources in the nation. For example, Georgia Tech researchers in the field of systems biology are integrating mathematics, physics, chemistry and biology with advanced, high-performance computing and engineering in order to harness the vast information growing out of the sequencing of the human genome and apply it to the detection and prevention of diseases through accelerated drug design and medicine. Additionally, researchers in the School of Physics at Georgia Tech are employing high-level, computer-based, nanoscale simulations to discover new technologies that can be used to store massive amounts of information in a compact space. These two projects, among others, highlight the partnership's ability to leverage advanced supercomputing resources to foster the development of new technologies with broad impacts on daily life.

Source: Georgia Institute of Technology

Citation: Georgia Tech, Oak Ridge and UT-Battelle collaborate on high-performance computing (2006, February 1) retrieved 18 April 2024 from <https://phys.org/news/2006-02-georgia-tech-oak-ridge-ut-battelle.html>

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