New Supercomputing Power

IBM Corporation has installed a 48-node Beowulf cluster in the F.W. Olin Engineering Complex. The high-performance, massively parallel cluster of workstations will enable researchers to run large-scale computing projects.

Work will include porting serial codes in numerical linear algebra to Beowulf’s message-passing environment under MPI (message passing interface) and PVM (parallel virtual machine) as well as radiation heat transfer and weather modeling.

The acquisition of the Beowulf cluster was made possible by a National Science Foundation grant, under the NSF’s Major Research Instrumentation program, and additional support from IBM Corporation and Florida Tech.

The principal investigators under the grant are Charles Fulton (also senior system administrator) and Gary Howell, mathematical sciences; Pei-feng Hsu, mechanical engineering; and Bill Shoaff, computing sciences. The senior system administrator is Donald Richardson, SEGS’ Spaceport Graduate Center. The junior system administrator is Mark Schuster, a senior majoring in computer sciences.

Modeling Hurricane Damage

Jean-Paul Pinelli, civil engineering, has earned a $187,900 grant from Florida International University to participate in the FIU International Hurricane Center’s public hurricane loss projection model project.

Florida Tech and other universities will work together to develop and maintain a computer model to assess hurricane risk and to project annual expected insured residential losses for specific Florida locales. Original funding is from the Florida Department of Insurance.

The model comprises three components: wind, vulnerability (damage)
Faculty and Staff News

Bob Taylor, humanities and communication, wrote “In the interests of justice: the burial of Pindexter Eugene Williams, 1970.” He presented his paper at the Florida Historical Society’s annual meeting in Cocoa Beach, Fla.

Kathy Turner, Evans Library, gave a presentation to the American Society for Quality, Greater Melbourne chapter, on successfully locating and evaluating Internet information.

Terry Oswalt, College of Science and Liberal Arts, was the lead judge for the special awards given by the American Astronomical Society, the Astronomical Society of the Pacific and the International Amateur-Professional Photoelectric Photometry Association. The awards were presented at the 2001 Intel International Science and Engineering Fair in San Jose, Calif.

Judi Marino, undergraduate admission, was a faculty member of the College Board Summer Institute on College Admission, held in Orlando, Fla.


Transitions

Who’s new: Jennifer Griggs is assistant director for weight and fitness and Rich Bricker is assistant director for facilities, Charles and Ruth Clemente Center for Sports and Recreation; Cecil Camacho is custodial supervisor, auxiliary services; Curtis Robinson is research engineer I, Center for Software Engineering Research; Cynthia Smith is catering/dining room supervisor and Mieke Olswang is assistant unit manager, SUB Café; and Karen Brown is office administrator, computer science.

Promotions: Paula Krist is director of institutional research; Tammy Rigsby is information systems specialist, development; Rebecca Hoyt is administrative assistant, Center for Software Engineering Research; and Erica Yahya is an admissions counselor.

Florida Tech will lead the vulnerability, or damage, team. Among several intended uses, the completed model should support the Florida Department of Insurance and the insurance industry in rate-making and provide a state-of-the-art, wind field model for public use.

Chelakara Subramanian, aerospace engineering, is the Florida Tech co-investigator. Other institutions involved in the project are Florida International University, University of Florida, Florida State University and the National Institute of Standards and Technology.

Hurricane Modeling continued from page 1 and insured loss. Florida Tech will lead the vulnerability, or damage, team.

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Florida Tech and the News Media

Quoted recently in Florida TODAY were, from the School of Business, Jerry Cahill, lowering the federal interest rate, local firms dropped from Russell stock index and a local hedge fund; and Tim Hollingsworth, effects of the shifting economy on Brevard county. From the College of Engineering, James Whittaker, PC viruses and prediction of Microsoft legal issues; John Williams, 2001 hurricane season; Muzaffar Shaikh, business expansion for a military electronic systems supplier; and Lee Harris, 2001 human powered submarine. From the College of Science and Liberal Arts, Nick Nichols, a photo exhibit at Brevard Museum of Art and Science; and Richard Turner, geckos. From the School of Psychology, Monique Levermore, the GIRLS program and remorse; and Radhika Krishnamurthy, single fatherhood. Others quoted were, Nikki Hoier, artificial reefs in Sebastian; and Mike Perry, families’ search for colleges. Florida TODAY opinion pieces were written by Bob Taylor, first 100 days of the Bush administration; George Maul, a World Seas Organization for the United Nations; Mike Slotkin, working poor at risk in business slowdown; Arvind Dhople, local drinking water safety; and Lynn Weaver, research on electrotechnologies.

The following were featured in Florida TODAY’s Spotlight on Neighbors: Mark Ritter, athletics; Judi Marino, undergraduate admission; Tom McFarland, Evans Library; Rodney Bowers, Academic Support Center; Stephen Reiach, computer sciences undergraduate; Jackie Battisti and Clay Hall, development; John Williams, DMES; Ken Droscher, alumni affairs; and Rob Gribbroek, university publications.

Published elsewhere were James Whittaker, IEEE Software Magazine, on software’s invisible users; Louisville, Ky. The Courier-Journal on fighting computer viruses; and PC Advisor (UK) Magazine, on virus protection.

Featured in the Orlando Sentinel from biological sciences were Richard Tankersley, on the migration behavior of female blue crabs, and Arvind Dhople on fighting leprosy’s spread. Hamid Rassoul, physics and space sciences, was quoted on earthquake aftershocks.

Annie Becker, was quoted on Web site construction and usability in Brevard Business News; Kate Shelton, was quoted in Meetings South Magazine on good university settings for conferences; Cem Kaner, quoted on Computerworld.com on opposition to the Uniform Computer Information Transactions Act; John Williams’ hurricane predictions and Lynn Weaver’s ideas on electrotechnologies research were published in the Daytona Beach News-Journal; and Nikki Hoier, on the Sebastian artificial reefs in the Vero Beach Press-Journal.

On TV were Arvind Dhople, WESH-2, local water quality; Monique Levermore, Fox-35 and WKMG-6, the GIRLS program; and Nikki Hoier and DMES undergraduate Rhian Resnick, the Sebastian artificial reefs. Hoier and Resnick appeared on all five Orlando-area network-affiliate stations.

On WMMB 1240-AM local radio were Jean-Paul Pinelli, his grant to model hurricane damage, and John Williams, hurricanes.

Young Researchers Gain Experience

Eight undergraduates from universities around the country are participating this summer in lab and field studies projects here. They are funded by a grant of over $118,000 from the National Science Foundation Division of Ocean Sciences.

Elizabeth Irlandi, oceanography, earned the grant from the Research Experiences for Undergraduates (REU) program. It funds an eight-week program of applied research in marine and environmental systems, which culminates in oral presentations of the participants’ research projects.

The students, who will be starting their junior and senior years, are from such institutions as the University of Pennsylvania, University of South Carolina, University of Puerto Rico and University of Delaware. They work with faculty on such projects as sustainable land development, water quality issues, coastal dynamics, remote sensing, biofouling, potential predation on hard clams and assessing East Florida shoreline changes.

Other Florida Tech faculty researchers involved in the REU program are Iver Duedall, Geoffrey Swain, Charles Bostater, Eric Thosteson, John Windsor and Gary Zarillo.
Catholic Campus Ministry Endowment Grows

Two foundations have committed to supporting the Catholic Campus Ministry with a total of $50,000 toward the ministry’s endowment fund.

The Amaturo Foundation of Fort Lauderdale, committing to $25,000 over two years, gave the ministry an initial $12,500 in June. In addition, the foundation made a separate $10,000 gift to the ministry in 2000.

The Florida Tech Catholic Campus Ministry set a goal for its endowment fund of $700,000. At the close of the fiscal year on April 30, the fund total had risen to $485,700. The ministry campaign will end at the close of the Campaign for a Rising Star on April 30, 2002.

On Verge of Great Things

“This was WFIT’s best year ever in terms of income, new members and underwriting,” said Terri Wright, WFIT general manager.

When the station’s FY 2000 achievements were reviewed recently, staff found much to smile about. The Arbitron ratings are at the highest level accorded to WFIT. The cumulative audience, for example, reached 23,000 in spring 2000, which was 4.5% over spring 1999. Time spent listening increased to 7.1%, 25% over spring 1999.

The station’s income boosts included their shortest fund drive ever in January 2001, when $15,000 was raised in just seven days, and the most successful pledge drive, which took in $28,288 last October. A successful golf tournament last fall grossed over $9,000.

WFIT, which since spring reaches listeners worldwide through audio streaming for Web broadcasting, now broadcasts 24 hours a day with the implementation of an automation system.

Faculty Grants
Continued from page 1

Chelakara Subramanian and Kunal Mitra, mechanical and aerospace engineering, earned $15,000 for their project, titled “Thermal behavior of materials subjected to high-energy radiation.”

Hector Gutierrez, mechanical and aerospace engineering, and Muzaffar Shaikh, engineering management, both earned $10,000 continuation grants for ongoing projects.

Pierre Larocelle, mechanical and aerospace engineering, earned $15,000 for an advanced motor control efficiency study.

Virender Sharma, chemistry, earned $11,000 to develop a cost-effective and energy-efficient method for controlling disinfection byproducts in drinking water treatment processes.

Eric Thosteson, marine and environmental systems, earned $31,000 for a project using solar power to cut down on maintenance to marine structures and water tanks. Pei-feng Hsu, mechanical and aerospace engineering, earned $6,000 for upgrades on the university’s new Beowulf supercomputer cluster.