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WHISTLE

FACULTY/STAFF NEWSPAPER

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THE GEORGIA INSTITUTE OF TECHNOLOGY

Mullin and Hutchins form new OIT leadership team

Goal: bringing equal focus to academic, administrative bodies

Theresa Harvard Johnson Office of Information Technology

apping a search that began last fall, John Mullin has been named director of Georgia Tech's Office of Information Technology. He succeeds Gordon Wishon, who left in August for a position with the University of Notre Dame.

In addition, Ron Hutchins has been promoted to a new, separate position created for the purpose of meeting the demands of Tech's academic and research communities.

The position was created in response to concerns among the academic and research communities that Tech might lose its competitive edge if OIT were more focused on administrative efficiency than on developing its academic capabilities. Since each of these entities has different priorities, it was decided that each would have its own representative. OIT is taking this team-oriented approach in an effort to bring equal focus to divergent needs in a manner consistent with a top-tier technological university.

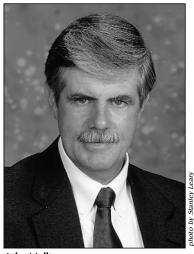
The newly formed leadership team will work closely with Provost Jean-Lou Chameau and Bob Thompson, senior vice president of Administration and Finance, in selection and implementation of IT solutions for the campus.

"We are pleased to announce this exciting change in the focus and leadership for the Office of Information Technology," said Chameau. "One of my goals as provost is enhancing the role of information technology and its support in the academic and research areas. The transition under way in OIT for new leadership has presented an opportunity to support this focus."

Thompson said, "This partnership brings over forty years of combined knowledge, executive managerial expertise and professional skill in the information technology environment under one umbrella, and into an academic environment that fosters blending technologies with the

Institute's teaching, learning and research missions. Mullin and Hutchins are both committed to building upon the strengths of OIT and forging new campus-wide partnerships that benefit the entire academic, research, administrative and residential communities of Georgia Tech."

Mullin has served as interim chief information officer since Wishon left in August 2001. He is now the associate vice president and associate vice provost for Information Technology, as well as its chief information officer (CIO). As CIO, he will oversee the development, implementation and support of information technology



John Mullin

systems and services.

He joined Tech in 1994; two years later he was named director of OIT's Operations and Engineering group, where he led the modernization of the campus electronic network infrastructure and the expansion and modernization of the campus computing environment.

In 1998, Mullin became the executive director of OIT, responsible for the development, implementation and operational support of information technology needs for the campus.

"We are committed to moving forward with this new direction that has been set in motion by our organization's innovative leadership structure," said Mullin. "Our efforts are concentrated in two key areas —

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What a wearable world: computers for better living

Elizabeth Campell Institute Communications and Public Affairs

had Starner has been wearing his computer since 1993. What began as a short-term experiment became a life-long project, some would even say a mission.

Starner is a guru of sorts when it comes to wearable computing. Several of his graduate students in the College of Computing also use wearable computers on a daily basis. For these researchers, however, a wearable computer is not just the newest gadget or high-tech status symbol, but a driving force in their computer research — how to build computer applications that make the user smarter and more efficient in completing day-to-day tasks.

"Suddenly, for the first time," says Starner, "our computers have the ability to see and hear the world from our perspective. Instead of being deaf, dumb and blind sitting on our desks or in our pockets, our computers might be able to observe what we do all day, understand what is important to us, and act as a virtual assistant that helps us on a second-by-second basis."

He envisions wearable computers and their applications progressing to the point where everyone has a virtual personal assistant, similar to a corporate executive's assistant. The computer would remind the user of appointments, automatically schedule meetings, and open relevant notes and documents as the user talks about different topics.

"Being able to get to your keyboard or screen so quickly that it's so easy to take down a memory or a quotation is incredibly valuable," Starner says. "Another thing wearable computers are very good for is when you need to use your computer while doing something else, for example, if I'm in the middle of a conversation. The point is to discuss information or to be social; the computer is there as an assistant.

"Wearables also allow a new means for communication. By combining a head-up display with services like an Instant Messenger, I can ask for a colleague's help while I'm in a group discussion at a conference or work site. This is a great advantage when I'm on a panel session and want to appear smarter than I am!"

Wearables continued, page 2

Ferst Center gets new director

David Terraso Institute Communications and Public Affairs

Starting next month, the Robert Ferst Center for the Arts will have a new boss. Jay Constantz will leave his post at Bayfront Park in Miami to take over as the new director of the arts center.

"I find the Robert Ferst Center to be one of Atlanta's premier cultural institutions," said Constantz.

Constantz's hiring ends a fourmonth search and capped more than one year of strategic planning following the departure of the Center's previous director, John Talbott.

Sue Rosser, dean of the Ivan Allen College and chair of the Ferst Center's search committee and management team, said the decision to hire Constantz was unanimous. "Everyone agreed that he was the

person who could move the center to the next level," she explained.

President Wayne Clough added that Constantz understands the Ferst Center's unique mission to serve both the campus and neighboring Atlanta communities. "Jay Constantz is an accomplished arts leader who will help us take the Ferst Center into its second decade and establish it as one of Atlanta's top cultural resources," he said.

Constantz will take the helm at the Center April 8, just as the current season is winding down, giving him time to plan for the new season that begins in mid-October.

Constantz has a long history in Atlanta, serving as the assistant general manager at the Fox Theatre for 12 years and events manager for three years. He left his position as

Ferst continued, page 3

"QUOTE" UNQUOTE"

"What we need when we nurture our young is to make sure that we don't turn off that natural curiosity. The advantage of SciTrek is it has facilities that you don't have at home or school so that you can broaden the background of the young person."

—Paul Ohme, director of the Center for Education Integrating Science, Mathematics and Computing (CEISMC), on the new exhibits at the city's interactive science and technology museum, which has overcome significant financial difficulties in recent months.

(Atlanta Business Chronicle)

"The system never sleeps. It's vigilant. It's watching all the time for the presence of fog."

—Gary Gimmestad, the Glen P. Robinson Chair in Electro-Optics, on a new warning system developed at GTRI and being tested by the Georgia Department of Transportation. Earlier this month, a 130-vehicle accident in North Georgia was blamed in part on a sudden fog that impaired visibility. (WXIA-11)



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Georgia Tech is a unit of the University System of Georgia.

\$1 million gift to benefit servant leadership initiative

David Terraso Institute Communications and Public Affairs

he Bradley-Turner Foundation is giving Tech a \$1 million endowment to fund internships as part of the school's servant leadership initiative. Students will get the opportunity to put the leadership skills they learn in class to the test at a variety of businesses, government agencies and charitable organizations.

"This is a big step toward our overall servant leadership initiative," said Vice President of Student Affairs Lee Wilcox.

The two year-old initiative is the brainchild of President Wayne Clough, designed to teach servant leadership skills to all undergraduates at Tech. A departure from the traditional hierarchical style, servant leadership fosters collaboration between leaders and the others in the organization. According to the

servant leadership model, it is just as important for bosses to listen to their employees as it is for the employees to communicate with their boss.

Tech's approach to teaching leadership is different from most university programs, said Chemical Engineering Professor Arnold Stancell, because "With most programs, it's specially selected students who are taught leadership skills. And many of these kids don't need it. Tech's program is trying to touch all undergraduates."

Recently appointed to the new Turner Chair of Servant Leadership, Stancell is teaching a new class in the fall, Management 4803A, Servant Leadership. The course will be open to juniors and seniors of all majors and has no prerequisites. Initially, enrollment will be limited to 30 students, but could increase as interest grows.

One of the lessons students will learn in the new course, Stancell

said, is that "servant leadership is effective in all situations and organizations, whether they be private, forprofit companies, universities or non-profit charitable organizations."

In addition to Stancell's course, modules in Psychology 1000, Adjustment to College Life, are being expanded and modified to reflect the servant leadership style. According to Bill Osher, director of Success Programs, about 60 percent of Tech freshmen go through the class

Management Professor Don Fedor is also including lessons in servant leadership in his section of Management 3101, Organizational Behavior. The class is a requirement for all Industrial Engineering and Management majors.

Encouraged by the gift from the Bradley-Turner Foundation, Wilcox said, Tech will continue to seek funding to keep the initiative growing.

Wearables, cont'd from page 1

Acknowledging limitations

Starner is passionate about the potential of wearable computers and feels the future is bright for their mainstream acceptance. However, he does recognize their limitations.



Thad Starner

"There are four problems in wearable computing — power, networking, privacy and interface," says Starner. "Adding more features to a computer — a faster CPU, bigger disk, wireless network connection, etc. — requires more power, which in turn implies larger batteries and more weight. You have to design systems that take little power and little space and last a long time."

Starner's current wearable gets 13 hours of power using two standard camcorder batteriess, a vast improvement over his earlier systems.

"Another problem is networking, off your body to the Internet and networking on the body between the computer's components," Starner says. "These different components

Looking for the next killer app

A VIRTUAL ASSISTANT

The Contextual Computing Group develops applications and interfaces for a wearable to be aware of what the user is doing and to assist as appropriate:

• GPS Schedule Prediction

Daniel Ashbrook, a recent Tech graduate, developed an application using GPS (Global Positioning System) data to predict a user's actions. Used in concert with other applications, the wearable can use this information to let callers know when the user is unavailable and may next be available.

• Conversational Agent

Doctoral student Ben Wong's Conversational Agent application uses voice recognition software to capture the words a user speaks during everyday conversations, allowing the user to control the wearable with few explicit commands.

ASSISTIVE TECHNOLOGY

Some assistive technology projects have grown out of Starner's wearable computing research as well:

Mobile Sign Language Translator

This project, led by Ph.D. student Helene Brashear, uses a wearable computer system to track users' hand movements as they sign in American Sign Language. The application translates the signs into text to facilitate communication with non-Sign users.

• Gesture Pendant

A related assistive technology project is the Gesture Pendant, a wearable system that recognizes and translates simple hand gestures into commands for home appliances. This system can also track tremors in the hands to aid in the monitoring of health conditions or assist in watching for signs of overmedication.

need to talk to each other, so an onbody wireless bus (an internal electrical pathway between computer components) is an area of research."

Safeguarding personal information is also an issue, says Starner. "Wearable computers allow you to have access to information that you normally wouldn't have ... however, the sensitive issues are still there. You have to figure out how you're going to protect your privacy.

"However, I find that the most interesting problem is interface. How do we communicate with the computer and how does it communicate to us?"

The future of wearables

Starner is very enthusiastic about the real-world applications of projects coming out of his lab. He sees wearable computers becoming more common in the future and points to the popularity of MP3 music players, predicting the portable audio devices will continue to grow in functionality, eventually merging into a general-purpose device worn on the body

Starner notes a couple of commercial wearable systems that have successfully been marketed to industry. One audio system helps workers quickly fill mail orders in a warehouse operation. Another system involves a scanner designed for workers to wear like a ring enabling them to easily track packages as they are moved.

INNOVATIONS @GEORGIATECH

This is the most recent article in an ongoing series focused on the research currently under way at Tech. A complete archive of stories with multimedia is available at www.innovations.gatech.edu

Ferst, cont'd from page 1

executive director for the Midtown Alliance's First Night Atlanta in 2000 to head up Bayfront Park in Miami.

"We were very impressed by his work at Bayfront Park," said Bob Harty, executive director of Institute Communications and Public Affairs and search committee member. "They were in a deficit and under investigation for corruption when he joined that venue. He came in and did a stellar job of turning that place around."

In his first five months at Bayfront, Constantz retired the park's \$1 million debt and turned it into a \$250,000 surplus by the end of his first year. He expanded profits to \$500,000 by the end of the second year. In addition, he brought the world-renowned Cirque du Soleil to Miami for the first time, leading to an extended run and a yearly return engagement.

Clough noted an organizational change as well. "With Constantz's appointment the director's reporting line is changing to the Office of the President through Vice



Jay Constantz

President for Student Affairs Lee Wilcox," he said. "This completes a reconstitution of the structure for the Ferst Center that follows the recommendations of the new strategic plan developed this past year. It is consistent with the objective to position the Ferst to better serve its student, faculty and staff constituency as well as the outside community, which is primarily interested in the performing arts series."

The center already has seen its popularity rise with students under Interim Director Andrea Hoffer. This season, the center sold out 10 of the 22 shows on its calendar and saw its

average ticket sales per show jump from 39 percent two years ago to 79 percent this year.

Constantz said he plans to build on that success by complementing the programming at other venues such as the Fox, the Rialto and the Woodruff Arts Center rather than competing. "If we're all communicating and we know the direction that each one is going, then we can do programming that complements each other rather than competes," he explained.

Constantz already has a few ideas on how he'll try to make the center more attractive to students and he plans to work closely with the Student Center Concert Committee to bring acts that will not just entertain, but broaden their horizons.

He's also looking at ways to attract new patrons and make the current ones more aware of what's going on at the center with tasteful and creative advertising

But in the end, Constantz said, it's the shows that will keep people coming back. "We have to make the experience unique, inviting and wonderful so people will want to come back and bring their friends with them."

IN BRIEF:

Talking with Deirdre

The School of Economics presents scholar Deirdre McCloskey, the Distinguished Professor of Economics, History and English at the University of Illinois-Chicago and the Tinbergen Professor of Economics, Philosophy, Art and Cultural Studies at Erasmus University in Rotterdam, for a series of lectures on March 28 and 29 dealing with issues both professional and personal. On March 28, she will give a talk on "Learning to Love the Bourgeoisie" at 11 a.m., location to be announced. Later, at 3 p.m. in the Clary Theater, McCloskey will discuss her experience as a transgender person in "Crossing: Notes of a Novice Woman." On March 29, together with Economics Professor Stephen Ziliak, she will discuss "Oomph, and the Bankruptcy of Statistical Significance," at 11 a.m. in room G-17 of the Habersham Building. For more information, visit www.uic.edu/~deirdre2 or call 894-4917.

Study abroad

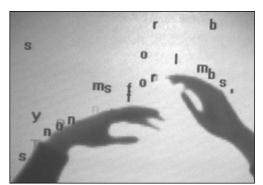
The Office of International Education will offer a **Fulbright Scholar workshop** on April 3 and April 23 at noon in room 308 of the Savant Building. Information will be provided on how faculty can apply for this prestigious scholarship that supports teaching/research activities in more than 100 countries around the world. Information on funding opportunities that assist faculty based overseas in visiting Tech will also be made available. Call 894-7475 to attend.

Seamless succession in Financial Aid Marie Mons is moving on up. Mons is the new director of Financial Aid. Mons previously served under Jerry McTier as associate director, Student Financial Planning and Services. She stepped in as interim director after McTier's retirement last month. Mons has been with

Poetry with a kick

Georgia Tech since 1994.

On April 1 and 2, at Wesley Center for New Media, adjacent to the Library. The School of Literature, Communication, and Culture in Ivan Allen College presents TechnoPoetry Festival 2002, produced by the 2002 McEver Chair in Writing, poet Stephanie Strickland, showcases the work of leading artist/poets who use digital techniques (shown below). Composing with new linguistic media — laser beams, bio-states, network flows, game structures, interactive multimedia Web installations and experimental video - modern technology combines with older poetic forms: speech, image, song, alphabetic text, and Chinese characters to explore the meaning of the relationships between body, biology, and technology. For a schedule, visit www.technopoetryfestival.com



Poet Camille Utterback's "Text Rain" project is an installation of projected video that invites the user to interact with cascading letters and words.

OIT, cont'd from page 1

developing a comprehensive information technology strategy for the campus and initiating new technologies that will specifically target the academic and research missions of the Institute

"I am proud to be a part of this vision," he said, "and equally excited to continue our efforts toward meeting the information technology needs of this campus."

Hutchins, formerly OIT's director of engineering, is now the associate vice provost for Research and Technology and chief technology officer (CTO). His role will be to develop new initiatives in support of the Institute's academic and research communities while maintaining close ties to the architectural and operational goals of OIT.

A Georgia Tech alumnus, Hutchins joined the faculty in 1981 where he performed research and taught computer networking and technology courses for the School of Information and Computer Science, now the College of Computing. He helped to develop instructional and research laboratory facilities for student use, and a graduate and undergraduate course curriculum using those facilities. Hutchins' focus in OIT has been

maintaining the strategy and architecture of the Georgia Tech computer network, one of the largest academic campus networks in the Southeast.

"My twenty-year career here at Georgia Tech has been both interesting and rewarding," said Hutchins. "Over the years, I've seen information technology take on a new importance here on campus, bringing opportunity and challenges. As we seize the opportunity, the new leadership model for information technology will help us meet the challenges."



Ron Hutchins

A history of collaboration

Mullin and Hutchins have worked together for several years, blending their joint expertise to orchestrate several successful initiatives.

Capitalizing on the opportunities provided by the 1996 Olympics, they led the **FutureNet** initiative, which modernized the Institute's network infrastructure into one of the most capable and comprehensive university networks in the world. Among the benefits of this effort was Tech's early participation in the Internet-2 effort, which provides a test bed for explorations in the use of high bandwidth networking dedicated to the research and education community.

Hutchins and Mullin conceived and led the development of the Southern Crossroads (SoX) gigapop. SoX, which Tech operates in collaboration with Georgia State University and the University of Georgia to provide a high-speed aggregation point for many universities in the Southeast, providing world wide high-performance network access for research and academic uses.

Wireless technologies have been another area of growth on campus. The GT LAWN (Local Area Wireless Network) project presented an opportunity for OIT to partner with several campus departments for one of the first secured wireless implementations on a university campus.