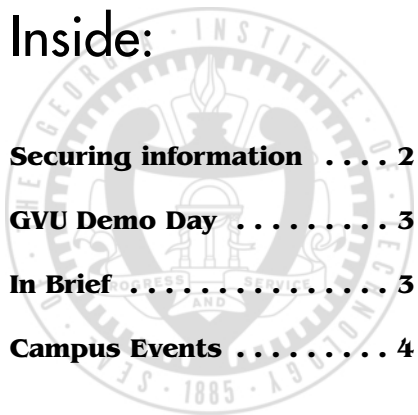


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THE WHISTLE

FACULTY/STAFF NEWSPAPER

VOLUME 29, NUMBER 14 • APRIL 5, 2004

THE GEORGIA INSTITUTE OF TECHNOLOGY

Moon to Mars



Photo by Nicole Cappello

Panelists from Georgia Tech addressed a public hearing of the President's Commission on Implementation of U.S. Space Exploration Policy last week at the Georgia Centers for Advanced Telecommunications Technology. The commission is charged with building consensus, providing recommendations to the President regarding moon-to-Mars research activities, increasing young people's interest in space science, and bringing in industry and other countries as space partners.

"The President has asked us all to work together," said Aerospace Engineering Professor Narayanan Komerath, above right. He urged the commission to push for expanded research and exploration into space, because he strongly believes that establishing a space-based economy is feasible.

Aerospace engineering sophomore Daniel Hegeman, center, asked the commission to "not be blinded" by engineering and policy complications that might hold back future space exploration, and he called for a faster timetable for journeys to the moon and Mars. "To say this will take two decades is too discouraging," he said. "Lead us like you were led."

Paul Ohme, left, director of the Center for Education Integrating Science, Mathematics and Computing, said future endeavors in space exploration would benefit K-12 programs by providing rich curricula for teachers to use in their classrooms.

Tech maintains strong showing in national graduate school rankings

Clough: 'Not just a basketball school'

Bob Harty
Institute Communications
and Public Affairs

The most widely read college rankings for graduate programs were released last week, and Georgia Tech's graduate programs are again ranked among the finest in the nation. Tech's graduate engineering curriculum maintained its national stature, once again ranked among the top five in the nation by U.S. News and World Report.

Seven of the 11 programs within the College of Engineering ranked among the top 10 in their respective disciplines, led by Industrial and Systems Engineering (ranked number one for the 14th year in a row) and Biomedical Engineering, which experienced a dramatic jump from 6th in 2003 to 2nd this year.

Among the highly competitive schools of business, Tech's College of

Rankings continued, page 3

USN&WR Graduate School rankings

College of Engineering

	2004	2003
Aerospace	4th	4th
Biomedical/ Bioengineering	2nd	6th
Civil	5th	5th
Electrical	7th	6th
Environmental	8th	9th
Industrial	1st	1st
Mechanical	7th	6th
Overall	5th	5th

College of Management

	2004	2003
Overall	42nd	51st

Faculty to participate in art exhibit

Sean Selman
Institute Communications
and Public Affairs

Faculty members from the College of Architecture and the School of Literature, Communication and Culture will exhibit an impressive display of their art this spring inside one of the city's most prominent buildings.

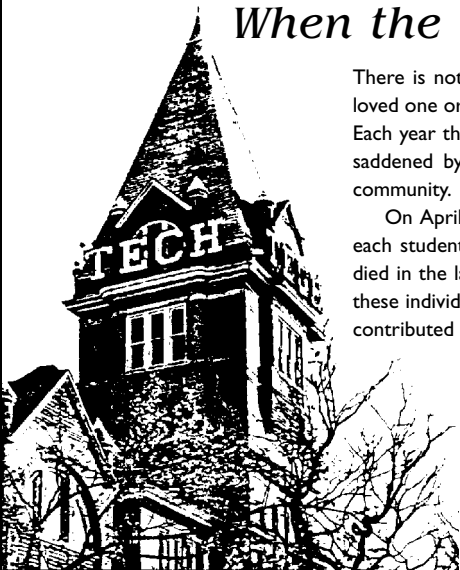
The exhibition, "FIVE: five media, five faculty from Georgia Tech," runs April 9-June 17. It is free and open for public viewing 10 a.m. - 6 p.m. weekdays and 11 a.m. - 4 p.m. Saturdays in the Lower Level Gallery of SunTrust Plaza.

"This exhibition highlights the

recent, varied artwork produced by the faculty at Georgia Tech," said Joanna Rolfes, the curator of the show. "It's exciting to work on an exhibit like this one that focuses on professors who are, in addition to their teaching and research, also successful and professional artists."

Appearing in the show will be the work of several faculty members in the College of Architecture's Architecture Program. They include photographer Ruth Dusseault, Georgia Tech's artist-in-residence; Associate Professor Harris Dimitropoulos, a painter; Assistant Professor Tina

Exhibit continued, page 2



When the Whistle Blows

There is nothing that can replace the joy that a loved one or cherished friend brings to our lives. Each year the Georgia Tech community is deeply saddened by the loss of members of our own community.

On April 15, we will honor the memory of each student, faculty, and staff member who has died in the last year. Join us as we pay tribute to these individuals who have touched our lives and contributed to our community.

Thursday, April 15, 2004
7:00 P.M.
Tech Tower Lawn
Speaker: President Wayne Clough

“QUOTE— UNQUOTE”

“Mars should be a growing commitment to permanence, or we shouldn’t even bother sending humans. We want to not just put a man back on the moon. We want (a space program) with continuity.”

—Former astronaut Buzz Aldrin, speaking to the President’s Commission on the Implementation of United States Space Exploration Policy, which held a two-day meeting last month at GCATT. (Space.com)

“I even looked at Princeton and Villanova, schools like that, just because the academic side is what I really wanted. Basketball-wise, yeah, you want to be happy. But I needed a balance ... I knew that Georgia Tech was a place where, academically, I was definitely going to be challenged.”

—Marvin Lewis, a senior in the College of Management and four-year starter on the basketball team, on the factors he considered when deciding where to attend college. (Los Angeles Times)

Users face tough choices in the battle over information security

Jane Sanders
Research News

Whenever a new virus begins flooding the world’s computer networks, individual users rush to download the latest anti-virus updates while network administrators hastily apply the latest patches to vulnerable equipment — then work overtime to repair the inevitable damage and limit the financial costs.

There must be a better way.

Researchers at Georgia Tech say solving the world’s growing information security problems will demand tough choices involving tradeoffs in cost, convenience and computing performance.

For instance, computer users will have to put a priority on security and be prepared to pay for it. They may have to retain well-tested software rather than install the newest version rushed to market. And they’ll have to bear the costs of rebuilding worldwide networks on secure foundations.

“Computers are being used more extensively, more widely and in more critical applications. They are a part of our lives today. They will be even more a part of our lives in the future,” says Ralph Merkle, director of the Georgia Tech Information Security Center (GTISC). “And for the past couple of decades we have put up with buggy code, unreliable computers, insecure computers, and computers that are vulnerable to viruses, worms, spam and other

problems. All of this has to change.”

From individual users to network administrators to senior government and industry officials, interest in information security is capturing people’s attention. GTISC researchers and others are now hopeful that consumer demand will boost efforts to solve myriad issues in the field.

“Information security is not just a technological problem,” says Professor of Computing Mustaque Ahamad, the GTISC co-director of technology. “There’s a lot more to it. It’s a complex problem, and its solutions will require new technology, policy, awareness and education.”

“It will take fundamental changes in how we deal with computer software development, which will require fundamental changes in our use of secure systems,” Merkle adds. “We will have to rethink a lot of the basic approaches that have been used.”

Computer users may also have to trade some convenience for security.

“The ideal information security system is transparent to the user, but that’s extremely difficult to design,” says Georgia Tech Research Institute (GTRI) researcher Jim Cannady, the GTISC co-director of applied research. “Users don’t like having to keep up with things like ‘smart cards’ (used by the U.S. Department of Defense and other organizations for electronic identification). It’s better to make a system as secure as possible before you turn it on.”

While GTISC and other researchers

address the complexity of this design challenge, beleaguered computer users are beginning to favor security and reliability over features and pricing, Merkle says.

“In general, commercially available products face very real marketing and pricing pressures that force companies to write code that is not always perfectly secure,” Merkle says. “Customers have voted in favor of this because if you write code with lots of features and it’s done quickly, they will buy it even though it’s hard to make it reliable. Now the message is changing. Customers would rather have computers that work reliably, and companies are taking that message to heart.”

This marketplace change in the understanding of what information security really means may go a long way toward solving the crisis, Cannady says.

“What is the true cost of information security?” he asks. “We may have to sacrifice flexibility, speed and performance to make systems more secure. When people want security more than they want a large monitor, things may change.”

For more information...

**Georgia Tech Information
Security Center**
www.gtisc.gatech.edu



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the address above. For more information,
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Georgia Tech is a unit of the
University System of Georgia.

Exhibit, cont'd from page 1

Simonton, who will exhibit several of her drawings; and Assistant Professor Mark Cottle, a sculptor.

Also appearing in the show will be work by Assistant Professor Sha Xin Wei, a media artist on the faculty in the School of Literature, Communication and Culture.

“We are all excited to have the opportunity to demonstrate the artistic exploration and practice that we bring to Georgia Tech,” said Dimitropoulos, adding that his work and that of his colleagues ranges dramatically in both style and materials.

Dusseault’s work, for example, tends to examine new urban forms with the aim of recording their utilitarian features that go unnoticed in the urban fabric. Xin Wei’s work explores “the architecture of responsive media spaces.”

The SunTrust Gallery, designed by noted architect John Portman, supports nationally and internationally known artists with ties to the Southeast and Atlanta, specifically. Another of its missions is to bring unique and stimulating art exhibits to downtown Atlanta.



“Four Two Tops,” image courtesy Ruth Dusseault

Ruth Dusseault, Georgia Tech’s artist-in-residence, will exhibit selections from her series “Fast Food Dining Rooms.” Of this work, she says, “Like hamburgers, fast food restaurants are made of prefabricated parts that are delivered to a site for assembly. Materials in these structures are low cost and durable. Smooth surfaces and tile floors are easily sanitized. Furniture is mounted on steel posts to facilitate mopping. The fixed space between chair and table is based on physiological research; providing a comfortable seat for every body type, but not so comfortable that people might linger.

“Very new urban forms are the subject of my work,” she continues, “because they exist at the point where utopian dreams enter reality. My aim is to record the utilitarian features that go unnoticed in the urban fabric. In an honest way, they reflect our culture’s relationship with rationality, economy and technology.”

Graphics, Visualization and Usability Center Convocation and Demo Day



At the Gvu Center Demo Day last month, graduate student Shwetak Patel tests out the new Georgia Tech Smartboard, a classroom-sized smartboard providing input-sensing capabilities over its entire surface, enabling research in large-scale interactive surfaces such as electronic whiteboards for classrooms and design studios. Doctoral student Jay Summet and associate professor Jim Rehg are developing a Virtual Rear Projection (VRP) technology to provide display capabilities over the entire surface, which will fill in shadows cast by people and do not cast blinding light into users eyes or annoying graphics onto their bodies.

The Gvu Center celebrated more than 10 years of innovation and looked toward the future during its recent Convocation and Demo Day. The Convocation featured industry speakers and the popular annual demonstrations of student and faculty research projects. The event also served as a house warming as the Gvu Center faculty, staff and students settle into their new home in the Technology Square Research Building.

IN BRIEF:

Tech partners with university in the United Arab Emirates

Georgia Tech's Language Institute and Etisalat University in the United Arab Emirates are initiating a collaboration that will have a significant impact on education in the UAE.

The Language Institute is setting up a Language Center at Etisalat University to help students meet the English language requirements to enter the university there.

The Etisalat College of Engineering is becoming a full university in September. The College currently offers majors in electrical and computer, and communications engineering. However, when the College becomes a university, its offerings will expand to include business and design.

In addition, the school's admission policies will expand to include all residents in the UAE instead of being limited to native-born residents, and the new university will be co-ed. All these expansions will place demands on the university to ensure that its students have an adequate command of English.

Roger Webb, chair of Tech's School of Electrical and Computer Engineering, is one of the members of the advisory panel guiding Etisalat's transformation. When it became clear that the new university would need to address the language needs of its new students, Webb suggested that university planners talk with the staff at the Language Institute to get help with setting up their Language Center. The Language Institute at Georgia Tech, which is part of Distance Learning and Professional Education, has been preparing students for academic work in American universities for more than 45 years.

Fraternity wins national award

The Georgia Tech chapter of Delta Chi has won a 2004 Undergraduate Chapter Award of Distinction from the North American Inter-Fraternity Conference (NIC). Nominated by fraternities, campus advisors and undergraduates, the award recognizes an organization's overall leadership and excellence in the advancement of fraternity ideals.

Delta Chi will receive the award at the NIC Annual Meeting Black Tie Dinner later this month in Washington, D.C.

Helping students victimized by house fire

On March 23, several students living in the Home Park neighborhood were fire victims. The Office of the Dean of Students has learned that the students need household items such as small appliances, plates, cups, glasses, cutlery, toiletries, towels, blankets, and sheets for twin beds. One student has informed the Office that he needs clothing.

For those who would like to donate any of the above items or would like to send a monetary donation to help these students, the drop-off location is the Office of the Dean of Students: Suite 210 of the Student Services Building. Call 894-6367 for more information.

Rankings, cont'd from page 1

Management climbed nine spots from last year to be ranked 42nd nationally, tied with the Terry School of Business at the University of Georgia.

Among public policy programs, Tech's information and technology management program ranked eighth.

"Consistency is what you look for in these types of things and consistency is what you find for Georgia Tech," said President Wayne Clough. "Our consistently high rankings in engineering indicate that we have been able to sustain a very high level of quality for a long time. It is especially gratifying to see our very young program in biomedical engineering receive such recognition. We have made intentional and substantial investments in both talent and facilities for biomedical engineering, and those investments are clearly paying off.

"I'm also very pleased to see our management program

rebound from the affects of the economic slump that has hit the technology sector so hard," Clough added. "The College has truly positioned itself as a leader in entrepreneurship and the management of technology for the 21st century. And our increased focus on impacting public policy is paying dividends as well. As the world becomes increasingly complex and technology so pervasive, these types of programs will become increasingly significant. I'm glad to see that we're very well positioned here."

Tech's College of Engineering retained its position in the elite top five, behind only MIT, Stanford University, the University of California at Berkeley, and the University of Illinois. The seven engineering programs ranked in the top 10 are: aerospace (4th), biomedical (2nd), civil (5th), electrical (7th), environmental (8th), industrial and systems (1st) and mechanical (7th).

"I'm very proud of the work done by our faculty, graduate

students and staff to achieve these rankings," Clough said. "We're consistently competing well against some of the finest universities in the world. Rankings are not why we are here, but the trends reflected in these rankings are notable.

"It's been a great week so far," he continued. "We're in the top five in engineering, top eight in public policy, top 50 in business, and in the national championship game in basketball."

As of press time, comprehensive listings for specialty areas ranked were not yet available from U.S. News and World Report.

For more information...

U.S. News and World Report

www.usnews.com

College of Engineering

www.coe.gatech.edu

College of Management

www.mgt.gatech.edu

CAMPUS EVENTS

Arts & Culture

Apr. 8

The bookstore welcomes Literature, Communication and Culture Professor Thomas Lux, who will be signing copies of his new collection of poetry, "Cradle Place," at 7 p.m. For more information, visit www.gatech.bkstore.com.

Apr. 13

The Georgia Tech Concert Band and Percussion Ensemble will present their annual spring concert at 8 p.m. in the Ferst Center for the Arts. For tickets, call 894-9600.

Apr. 16

The Ferst Center for the Arts welcomes Mark O'Connor's Hot Swing Trio with Jane Monheit at 8 p.m. Faculty and staff receive a 10 percent discount. For tickets, call 894-9600.

Brown Bags/Conferences/Lectures

Apr. 7

The School of Psychology's Colloquium Series welcomes Christopher Newland, professor of behavioral toxicology and pharmacology at Auburn University, on "Aging Begins in the Womb: Environmental Contaminants, Nutrition and Development across the Lifespan," at 3:30 p.m. in room 250, Coon Building. For more information, e-mail christopher.herzog@psych.gatech.edu.

Apr. 7

The College of Management's IMPACT Speaker Series welcomes Don Chapman, chairman of Tug Investment Corporation, at 4:30 p.m. in the LeCraw Auditorium.

Apr. 13

Ivan Allen College hosts a roundtable discussion, featuring History, Technology and Society Professor Willie Pearson and Economics Associate Professor Usha Nair, on "Environment Matters: The Influence of Mixed-Income Development on the Socio-economic Mobility of Public Housing Residents in Atlanta," at 11 a.m. in the Clary Theater.

Apr. 14

The Architecture Program Lecture Series continues with James Glymph of Gehry Technologies, at 5:30 p.m. in the College of Architecture Auditorium. For more information, call 894-6254.

Apr. 14

The School of Psychology's Colloquium Series welcomes Susan Goldin-Meadow, professor of psychology at the University of Chicago, on "How Our Hands Help Us Think," at 3:30 p.m. in room 250, Coon Building. For more information, e-mail christopher.herzog@psych.gatech.edu.

Apr. 15

The School of Mechanical Engineering's Woodruff Colloquium Series welcomes Steven Vogel, professor of biology at Duke University, on "Cambered

Wings and Chain Saw Cutters: When Have We Managed to Copy Nature's Mechanical Devices?" at 11 a.m. in the MaRC Auditorium. For more information, e-mail ari.glezer@me.gatech.edu or call 894-3266.

Faculty/Staff Development

Apr. 13

The Center for the Enhancement of Teaching and Learning's IT Tuesday Series hosts "Submitting Grades Online and Other WebCT Gradebook How-tos," at 11 a.m. Sessions are 30 - 45 minutes in length and can be accessed from a personal computer. For more information or to register, visit www.cetl.gatech.edu.

Apr. 13

The Office of Sponsored Programs hosts an informal workshop on "Conflict of Interest," with Associate Vice Provost for Research Jilda Garton, at noon in the Research Administration Building. To register, call 894-6945.

Miscellaneous

Apr. 20

A called meeting of the General Faculty and the Academic Senate, and the annual meeting of the Academic Faculty will be from 3 - 5 p.m. in the Student Center Theater. An agenda is posted on the faculty governance Web site: www.facultysenate.gatech.edu. For more information, e-mail said.abdelkhalik@me.gatech.edu.

CLASSIFIEDS

APPLIANCES

Microwave, full size, stainless steel, Emerson, less than 2 years old, \$50. E-mail Louis at gtg515k@mail.gatech.edu.

White Amana cooktop, gas. Kenmore digital built-in oven, white. Both in good condition. \$100 for both. Call 770-844-0852.

White Jenn-Air downdraft cooktop. Two fixed burners, swappable burner module/grill/griddle. \$200 OBO. E-mail bleahy@cc.gatech.edu.

AUTOMOBILES

1995 Accord LX. Great shape, many new things, 5-speed, 188K miles. \$3,900. E-mail bill.halabi@facilities.gatech.edu.

FURNITURE

Bedroom set, maple finish, queen headboard, 7-drawer dresser w/large mirror, 2 night stands w/2 drawers each. Lots of storage. Good condition. \$300. Call 385-4901.

Steel-bunked futon, couch/bed on bottom, twin mattress capable on top. Red, sturdy, great condition, wonderful design. \$130. Call 404-894-2753.

Queen-size oak waterbed frame, headboard, and mattress with matching chest and dresser with mirror, \$500. Call 385-0042 or e-mail chris.hamlin@oit.gatech.edu.

lin@oit.gatech.edu.

White solid maple baby bed and mattress by Simmons, \$145. White chest of 4 drawers, contemporary style, \$75. White tubular twin bed, no mattress, \$45. Solid wood port-a-crib with mattress, \$45. Call 770-923-1048.

Teen bedroom set, white/yellow, queen-size headboard/footboard w/railings, 2 dressers with lots of storage, vanity with mirror, matching chair and hutch. \$300. Call 770-825-0087 or e-mail kemp6735@aol.com.

REAL ESTATE/ROOMMATES

House for Sale/Vinings: approx. 5,500 sq. ft. finished living space. 6BR/4.5BA. Bright, open floor plan. Wooded back yard. 20 mins. to campus. \$600,000. See: <http://homescenesusa.com>, use ID# 892684.

For rent: 1BR apartment at 1219 Francis St. Downstairs of charming, light-filled home w/deep lot on quiet street. W/D; ample closets. \$900. Call 404-816-8370.

For sale, 1035 Curran Street, \$249,900: Totally renovated 3BR/2BA bungalow in Home Park. Gorgeous hardwoods, new Berber, new kitchen, new bathrooms. Call 404-664-2471 or virtual tour at www.showing247.com/1035curran.

3BR/2.5BA home for sale in Conyers. 2-story, LR, DR, den, fenced, great schools. \$126,900. Do MLS Home Search for ID # 1455486 at www.rae-sellsatlanta.com or call Maria at 678-207-7316.

1BR/1BA Midtown condo shows like a model. Hardwoods, building with the pool and parking. The largest of the one bedroom units with two storage units. All appliances. FMLS# 901284. E-mail paul.miceli@gti.gatech.edu.

Bedroom for rent on Panola Road, one minute from I-20. Private bath, use of kitchen, \$400 month. Call 770-593-2527.

3BR/2BA brick ranch in Douglasville on corner lot, one street from I-20. Huge back yard. Two-car garage with remote openers, all appliances, fireplace, very spacious. Available mid-April. \$1,200/month. Call 404-931-5001 or e-mail jamcgruder@aol.com.

MISCELLANEOUS

1977 Kawasaki KE100 motorcycle. Only 953 miles, trail and street legal bike. It has high fender flaps but also lights, blinkers, etc. \$400. Call 894-7185 or e-mail aist26gt@earthlink.net.

Five-stone diamond ring. 1 carat total, 14kt. yellow gold, \$500. Call

894-0870 or e-mail marie.mcvay@icpa.gatech.edu.

Free black and gray lab/terrier mix, five years old, spayed, very sweet. E-mail xaunda@hotmail.com or call 678-612-1198.

Ads will run for a maximum of three weeks in the order in which they are received. The Whistle reserves the right to edit ads longer than 30 words.