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# THE WHISTLE

FACULTY/STAFF NEWSPAPER

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THE GEORGIA INSTITUTE OF TECHNOLOGY

## Library plans new faculty lecture series

Matt Nagel  
Institute Communications  
and Public Affairs

Did you ever wonder what was really happening in the research labs here at Georgia Tech? Well here's your chance to learn. The Library and Information Center is sponsoring a new lecture series called "Tuesday Talks," focusing on the exciting areas of research that are flourishing on campus. The lectures will feature Tech faculty as speakers.

Cathy Carpenter, Information Services Librarian said, "Libraries are in the business of sharing information, and we thought the Georgia Tech library was the perfect venue to sponsor such a program and to help promote and disseminate research findings across the campus."

Steve Potter, assistant professor in the Biomedical Engineering Department, will kick off the speaker series with a talk entitled "Hybros: Living Neuronal Networks" on February 22. Next month, College of Computing Associate Professor Irfan Essa, will follow with a talk on "Sensing the Aware Home," and in April, Assistant Professor Thad Starner will discuss "Face to Face Discussion with Wearable Computers."

Lori Critz, Information Services Librarian said, "Our goal of the lecture series is to increase understanding of what is usually quite esoteric information. We hope to make research understandable to the average person."

All of the lectures are free and will be held at 2 p.m. in the Wilby room of the Georgia Tech Library.

For more information...

Library and Information Center  
[www.library.gatech.edu](http://www.library.gatech.edu)



Assistant Professor Steve Potter will be the series' inaugural speaker.

## Pilotless aircraft learns to react on the fly



Megan McRaney  
Institute Communications  
and Public Affairs

Unmanned aerial vehicles (UAVs) are one step closer to someday matching — and possibly surpassing — their human-piloted counterparts, thanks to the completion of a project successfully tested by Georgia Tech and sponsored by the Defense Advanced Research Projects Agency (DARPA) and the U.S.

Air Force Research Laboratory.

Researchers from several partner institutions and organizations have helped to successfully build, test and fly the first rotary wing UAV, a helicopter called GTMax, with capabilities of flight control fault identification and reconfiguration, adaptive control and agile maneuvering — all operating on a single vehicle and under a single software architecture.

UAV continued, page 3

## Faculty/staff fund an institutional investment

Michael Hagearty  
Institute Communications  
and Public Affairs

Roll Call, Georgia Tech's annual fund, is continuing to raise money up until the June 30 deadline.

Organized by the Alumni Association, the money raised is part of a general fund overseen by the Georgia Tech Foundation and dispersed according to immediate need, as determined by President Wayne Clough and the Foundation.

Gerri Elder, the Association's donor relations manager, pointed out that tuition only covers a portion of the cost to educate Georgia Tech students. The annual fund helps to make up that difference.

In its 58th year, Roll Call reaches out to a number of constituencies — alumni, parents and friends — for assistance. These donations constitute the university's largest source of unrestricted funds.

Faculty and staff have the unique

Roll Call continued, page 3

## State among top 10 in venture capital funding

ATDC member companies receive \$104 million

Georgia ranked seventh in the nation for amount of venture capital raised during 2004, the state's best showing ever. ATDC member and graduate companies contributed 18 percent of the total — \$585 million — raised statewide.

In a total of 13 deals, a dozen current ATDC member companies attracted \$53 million in venture capital, while four ATDC graduate companies brought in another \$51 million. The numbers were reported in the latest study of venture capital investment activity in the United States, compiled by PricewaterhouseCoopers, Thompson Venture Economics and

the National Venture Capital Association.

Vice Provost for Economic Development and Technology Ventures and ATDC Director Wayne Hodges said, "It's a positive sign for Georgia Tech: a testament to the entrepreneurial spirit of our ATDC startup companies and a validation of Georgia Tech's important role in building the state's economy. From a broader perspective, we are encouraged to see Georgia's increased market share as an indication of its growing reputation among venture capitalists."

Georgia's showing topped all other states in the Southeast. For the fourth

ATDC continued, page 3

### 2004 venture capital funding

California:	\$9,345,925,400
Massachusetts:	\$2,774,903,600
Texas:	\$1,096,485,300
Washington:	\$868,280,400
New York:	\$721,129,500
New Jersey:	\$720,399,100
Georgia:	\$584,832,100
Pennsylvania:	\$526,065,900
Maryland:	\$512,349,100
Colorado:	\$443,599,200

source: MoneyTree

“QUOTE—  
UNQUOTE”

“When you are dealing with forms that are that distinctive and idiosyncratic, [a building] tends to take on a kind of signature quality. Atlanta is literally the same age as the city of Chicago but if you compare the two cities architecturally, we don’t compare. But we will start to take on an increasing international character by continuing to raise the level of excellence in terms of the city’s architecture.”

—Robert Craig, a professor in the College of Architecture, on the proposed design for the city’s new symphony center.  
(Associated Press)

# Computing visionary Pete Jensen dies

Elizabeth Campell  
Institute Communications  
and Public Affairs

Alton P. “Pete” Jensen, 79, an alumnus and emeritus professor who was an early advocate for the development and establishment of Georgia Tech’s computer science program, died Feb. 6 following a long illness.

He graduated with a degree in mechanical engineering in 1956, but by 1964 Jensen was among the first to lend his services to a newly formed School of Information Science. As a research engineer at what was then called the Rich Electronic Computing Center, Jensen taught and developed classes at the School while maintaining his job at the Computing Center. A specialist in hardware architecture and design, he is credited with single-handedly establishing and operating the School’s first computer laboratory. Jensen also installed the first e-mail system at Tech, in 1965.

In an interview for the College of Computing’s tenth anniversary, he said the idea of information science as an academic discipline was slow to gain acceptance. But the reluctance only enforced the pioneering resolve of Jensen and his acolytes.

“We managed to corrupt the students, who then corrupted the faculty,” he laughed.

Jensen formally joined the IS faculty in 1968 to, as he put it, “provide a window to reality out of the theoretical body of things.” Most of the classes he taught were self-designed courses concerning the business of managing computer enterprises.

“I tried to create a situation where students understood the organization and management of the computing industry, what its role was, and the importance of it,” he explained.

College of Computing Dean Rich DeMillo recalled, “By the time I arrived here as a grad student in 1969, Pete had set up shop on the third floor of the D.M. Smith Building in a large room with hardwood floors and no air conditioning. There, he enticed us with access to computers and technology. He also enticed us with his unique vision of how computers were going to be used in large organizations. It is no surprise that many industry leaders of today learned how to blend technology and business in Pete’s labs and courses.”

One of the major developments taking place when Jensen joined the School of Information Science was the concept of single-function computers, devices designed to perform specific tasks.

“These were small-scale computers, digital equipment, PDP-8-type machines costing \$50,000 — as contrasted with the larger machines that cost upward of \$10 million,” he recalled. “Pete was unselfish with his time and energy, and his network of friends was vast,” said DeMillo. “He was a key member of President Carter’s administrative reorganization of the federal government. He was instrumental in attracting an Army research lab to the campus. He connected faculty and students with local industry and thereby connected the local technology scene to the university. The many drop-in guest lecturers in his courses ranged from congressmen to world-class scientists. All



Pete Jensen

seemed to share the same deep connection to Pete and that was passed along to his students.”

Jensen retired in 1984 after 28 years at Tech, but his departure was short-lived. In 1987, he returned to campus as director of the School of Information and Computer Science and oversaw the transition to the College of Computing in 1990.

Peter Freeman, assistant director of Computer and Information Science and Engineering at the National Science Foundation and former dean of the College of Computing, said, “Pete was the first associate dean of the College of Computing and had a very direct hand in getting us off to a good start. Even after he retired, he remained a faithful member of the College’s Advisory Board throughout my time as dean and provided me useful insights and advice.”



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## Management faculty wing named for retired professor

Known for his incredible memory, Phil Adler has been able to maintain long-term relationships with many of the students he taught during his nearly 40-year career at the College of Management. Though he retired in 2000, the professor emeritus of strategic management continues to serve as a much-valued mentor to many of these alumni.

A group of graduates has returned the favor by completing a successful fundraising initiative to name the fourth-floor north wing of the Management building the “Donna L. and Dr. Philip Adler Jr. Faculty Excellence Wing.” The space is home to faculty offices, which is only appropriate, says Mack Reese, the alumnus who led the fundraising effort.

“His teaching ability and interest in and compassion for students are something that all Georgia Tech professors should aspire to,” explains Reese. “He’s always been available for me after I graduated, and he continues to be to this day. I’ve gone to



him for advice on ideas and challenges I’ve faced in my own business. He’s a friend in every respect of the word.”

Adler, a retired U.S. Air Force Reserve colonel, concurrently served as clinical associate professor of rehabilitation medicine at Emory

University School of Medicine during his years at Georgia Tech.

Much sought after for his expertise, Adler served as an organizational advisor to the White House Press Office and the Office of Management and Budget during the Carter Administration. In addition to organizational structure, his academic specialties include management theory, personnel management and high-tech program management.

Alumni do not remember Adler fondly because he was an easy professor, however. As the Hal and John Smith Chair of Small Business and Entrepreneurship, he taught by the Socratic Method, constantly putting students on the spot in class. “If you didn’t come to his class prepared, you paid for it,” Reese remembers.

In a 2001 interview, Adler echoed this point, saying, “They learned or else. You don’t tell the students the answer. You lead them to it and get them to develop their ability to think quickly and accurately under pressure, like the real world.”





## Media day

College of Sciences Dean Gary Schuster and Rudy Baum meet in Associate Professor Boris Mizaikoff's Applied Sensors Laboratory. Baum, editor of the American Chemical Society's Chemical and Engineering News, has written extensively on the future of chemistry as a discipline, was invited to Tech to tour the facilities and view the research being conducted on campus.

*UAV, cont'd from page 1*

The flight represents the completion of a project to develop an innovative new software-enabled control system with applications to UAVs.

The Georgia Tech team — Aerospace Engineering Professors Daniel Schrage and Eric Johnson and Electrical and Computer Engineering Professor George Vachtsevanos — was selected by DARPA to be the systems integrator for the entire rotary wing UAV project, integrating engineering advances from a distinguished group of other corporate and university researchers.

Advances in rotary wing UAVs are particularly important because of their requirement to take off and land in difficult terrain and restricted-size areas, such as ship decks, and their ability to hover while they identify and inspect specific locations.

Georgia Tech's primary contribution to the

overall project was an Open Control Platform (OCP), which gives the UAV the ability to reconfigure its software systems autonomously in flight.

The OCP is an object-oriented, real-time operating software architecture that can handle very large sets of data and computations in real time, similar to a pilot's brain reacting to enemy fire or changing weather conditions. The system also gives the UAV more agility to help avoid danger without exceeding critical flight parameters.

Based on this project's success, Tech has now been awarded funding for two follow-on programs for multiple UAVs in an urban warfare environment and for transitioning the technologies developed under the program to military vehicles.

For more information...

**UAV Research Lab**  
controls.ae.gatech.edu/uavrf

*ATDC, cont'd from page 1*

quarter of 2004, Georgia ranked fifth in the nation, with \$158 million invested that quarter.

In the Southeast, Georgia's \$585 million compared to \$335 million raised in North Carolina and \$264 million brought in by Florida firms. Georgia was the only state in the region to place in the top ten for 2004.

Georgia's strength remains in software, though with companies in the life sciences, telecommunication and semiconductors, its technology community is broader than in other southeastern states. North Carolina, known for its life sciences companies, attracted \$126 million in 2004. But

Georgia life sciences companies were not far behind, bringing in \$97 million — reflecting continuing growth fueled by a growing biosciences research initiative.

Two companies co-founded by Georgia Research Alliance Eminent Scholars were among the leaders in attracting outside funding. Lancop, a network security company founded by Georgia Tech professor John Copeland, secured \$12.5 million. Telecom infrastructure company EGT, co-founded by fellow professor Nikil Jayant, brought in \$4 million.

Since 1995, Georgia's venture capital showing has grown from 48 deals totaling \$161 million to 81 deals totaling \$585 million.

*Roll Call, cont'd from page 1*

ability to allocate their contribution to any of 75 individual accounts within a school or other university department. Monies raised through the annual fund go to pay for the more mundane, yet vital university operations.

These smaller gifts add up to a large amount of

money, Elder said. The annual fund is important for institutional flexibility, she added, and helps to defray incidental costs.

There is still plenty of time to participate in this year's Faculty/Staff Fund and make a difference in the campus department of your choice. Go to **www.gtalumni.org** to make a donation online, or call 894-0756 for more information.

# IN BRIEF:

## Spring Commencement shifts to Georgia Dome

Georgia Tech's 221<sup>st</sup> Commencement will take place Saturday, May 7, 2005 at 9 a.m. and will include both graduate and undergraduate students. The ceremony will be held at the Georgia Dome in downtown Atlanta.

The move to the Dome was prompted by the size of Tech's undergraduate student body, one that has finally outgrown the Alexander Memorial Coliseum for spring commencement. With insufficient room for all of the chairs on the floor and an ever-increasing number of graduates in the stands, the Coliseum is unable to accommodate the number of graduates and guests attending this important occasion.

After considerable research on everything from optimum distance in chair spacing to a ten-year history of weather on commencement day, the decision was made to stage the event at the Georgia Dome. With more than 2,500 students petitioning to graduate this semester, the Georgia Dome is one of the very few realistic options for accommodating that number of graduates and guests.

For additional details on Commencement, visit **www.gatech.edu/commencement**.

## Regents approve new degree programs

At the January meeting of the University System Board of Regents, Georgia Tech gained approval to offer two additional degree programs: a doctoral degree in applied physiology and a bachelor's degree in economic and international affairs. The Board also accepted a gift of \$10 million in software for the College of Engineering, since corporate gifts of more than \$100,000 must be formally approved.

## Online language classes offered

The University System of Georgia's Office of International Education is offering a new distance-learning initiative through a grant from the U.S. Department of Defense's National Security Education Program (NSEP). The online, interactive, multimedia courses in Japanese, Chinese and Russian have been developed to expose students to less commonly taught foreign languages.

Any student enrolled at a University System college or university that does not offer traditional classroom instruction in the desired language may register for one of the courses. The deadline for registration is March 1 and is limited to 20 students. Non-students interested in learning these languages may register as space permits.

Each language involves a four-semester sequence of courses, and scholarship opportunities offering a study-abroad experience are available to students who finish the first year of study. Faculty members from Georgia Tech will teach the Japanese and Chinese (Mandarin) courses, while Georgia State University faculty will teach the Russian courses.

In addition to online instruction delivered via streaming audio/video, as well as recorded exercises, technical assistance and interactive linguistic and tutorial services will be provided to students enrolled in the courses.

For more information on studying Japanese, Chinese or Russian online, visit **www.usg.edu/oie**.

# CAMPUS EVENTS

Arts & Culture

Feb. 16

The Ferst Center of the Arts hosts the Concord Jazz Festival with Diane Schuur, Karrin Allyson, Oleta Adams and Sara Gazarek. For tickets, call 894-9600 or visit [www.ferstcenter.org](http://www.ferstcenter.org).

Feb. 19

The Ferst Center for the Arts welcomes Les Ballets Trockadero de Monte Carlo for an 8 p.m. performance. For tickets, call 894-9600 or visit [www.ferstcenter.org](http://www.ferstcenter.org).

Brown Bags/Conferences/Lectures

Feb. 16

The Architecture Program’s lecture series continues with Parsons School of Design Director David Lewis on “The Opportunities of Restrictions,” at 3 p.m. in the College of Architecture auditorium.

Feb. 16

The College of Management’s IMPACT Speaker Series welcomes Sig Moseley, president of Imlay Investments, at 4:30 p.m. in the LeCraw Auditorium.

Feb. 17

The School of Mechanical Engineering’s Woodruff Colloquia Series features Chih-Ming Ho, professor of engineering at UCLA, on “Control of a Bio-System Through Technology Fusion,” at 11 a.m. in the MARC auditorium. For more information, e-mail [peter.hesketh@me.gatech.edu](mailto:peter.hesketh@me.gatech.edu).

Feb. 17

The Office of Information Technology hosts a free brown bag seminar, “Introduction to Windows Security,” to help users understand how to secure their computers. The primary focus will be on Windows XP. To register, visit [www.trainsweb.gatech.edu/mastcal.asp](http://www.trainsweb.gatech.edu/mastcal.asp).

Feb. 18

The School of International Affairs hosts members of the Consulate General of Canada to discuss “Nuclear Proliferation: New Challenges for International Institutions,” from 8:30 a.m. - 1:30 p.m. in the Student Success Center. To register, e-mail [caroline.lavoie@international.gc.ca](mailto:caroline.lavoie@international.gc.ca).

Feb. 22

The Materials Council’s Institute-wide Seminar Series welcomes Jiandi Zhang, assistant professor of physics at Florida International University, on “The Surface of Transition-metal Oxides: Correlation Electron Systems with Reduced Dimensionality and Broken Symmetry,” at 3 p.m. in room 183, Love Building.

Feb. 22

The Sam Nunn Security Program and CISTP host a Southeast Roundtable on Defense featuring Richard Houska, adjunct professor in the School of International Affairs, on “Intelligence and National Security,” in the Student Success Center. To reserve a seat, call 894-3199 or e-mail [angela.levin@inta.gatech.edu](mailto:angela.levin@inta.gatech.edu).

Feb. 24

The School of Mechanical Engineering’s Woodruff Colloquia Series welcomes UCLA Emeritus

Professor James Smathers on “B.S. in Nuclear Engineering: Is It a Good Preparatory Degree for Graduate Training in Medical Physics?” at 11 a.m. in the MARC auditorium.

Feb. 26

The College of Architecture hosts a symposium on “Architecture and Memory.” For more information, visit [www.coa.gatech.edu/symposium](http://www.coa.gatech.edu/symposium).

Faculty/Staff Development

Feb. 17

The Center for the Enhancement of Teaching and Learning will host a Faculty Development Seminar on “Educational Components of Research Proposals,” from 11 a.m. - 1 p.m. in the Library’s Homer Rice Training Center. Lunch is provided to registrants. Visit [www.cetl.gatech.edu](http://www.cetl.gatech.edu).

Feb. 23

The Office of Sponsored Programs offers a class in “NSF FastLane Proposal Preparation and Project Reporting.” Call 894-6944 to reserve a seat.

Miscellaneous

Feb. 17

The VOICE Initiative hosts an orientation on how to play a role in ending sexual violence at Georgia Tech at 4 p.m. A training session follows at 5 p.m. To sign up, e-mail [ann.frazer@health.gatech.edu](mailto:ann.frazer@health.gatech.edu) or call 894-9980. For more information, visit [www.voice.gatech.edu](http://www.voice.gatech.edu).

# CLASSIFIEDS

AUTOMOBILES

1967 Triumph TR4A. Owned for 27 years by Tech professors. Keep it in the family. Runs and looks great, \$7,500. Call 894-2719 or e-mail [andrew@math.gatech.edu](mailto:andrew@math.gatech.edu).

1992 Volvo 240. Champagne, beige interior, automatic, a/c, 100K miles, regular maintenance, \$4,500. Call 894-0761 or e-mail [neil.mcgahee@alumni.gatech.edu](mailto:neil.mcgahee@alumni.gatech.edu).

1993 Buick Century. Good condition, 110K miles, \$1,250. Call 404-255-0280 evenings.

1998 Chevrolet Silverado K1500. Burgundy, 88K miles, off-road package, premium sound, 32-inch mud grip tires, brush guard, nurf bars. Asking \$9,999. E-mail [tye.walker@stucen.gatech.edu](mailto:tye.walker@stucen.gatech.edu) or call 895-7379.

1999 Ford Taurus SE. Great condition w/maintenance records, leather, ABS, dual front air bags, remote key entry pad, alloy wheels, power seats, 97,700 miles, \$3,900. Call 404-579-6676.

2000 Audi A4 Turbo 1.8T sedan. Manual, 50K miles, excellent condition. Metallic silver exterior, black leather interior. Regular maintenance. Power windows/locks, ABS, CD. \$16,500. Call 404-931-9922.

2000 BMW 528i. Dark blue, excellent condition, fully loaded, sport suspension, moonroof, leather, remote entry, dual air bags, CD, alarm, 85K miles, \$21,000. Call 770-813-1714 or e-mail [mary.duncan@dev.gatech.edu](mailto:mary.duncan@dev.gatech.edu).

2003 Black GMC Sonoma. Two-passenger, like new, 20K miles, with warranty. \$11,000 OBO. Moved and must sell. Call Bob at 678-478-2142.

FURNITURE

4-piece white dresser set: 9-drawer dresser, 3-drawer dresser, 2-drawer night stand and 30"x40" mirror, \$150. Dark walnut dining table, 6 chairs, and hutch, asking \$225 OBO. Call Diana at 404-667-6290.

REAL ESTATE/ROOMMATES

Rent-to-own 3BR/2BA home in Roswell. Hardwood floors, new appliances, huge deck, bonus room, large 3/4-acre lot, open kitchen, plenty of space. \$1,195/month or \$169,000. E-mail [paul.miceli@gtri.gatech.edu](mailto:paul.miceli@gtri.gatech.edu).

Two-story, 2BR/2.5BA updated condo in Buckhead, patio overlooking golf course, W. T. Jackson school district, gated community. \$1,350/month includes association fee. Call 404-414-1232.

1BR/1BA condo in Midtown. One block from Piedmont Park, 2-minute

drive to GT, gym, pools, covered parking, 24-hour security. \$1,100/month OBO. Call 404-395-3140.

3BR/2BA new house for rent at 1895 West Kimberly Road in Fulton County. \$1,250/month negotiable, Section 8 welcome. Call 404-484-4662.

3BR/2.5 BA townhome w/garage in East Lake. 12 minutes to GT. New appliances. Ideal roommate plan. Spacious bedrooms, gourmet kitchen, gas fireplace & hardwood floors; swim community. \$1,300/month. Call 404-325-1909.

SPORTS/FITNESS/RECREATION

Exerhealth aerobic rider, \$75. Call 404-467-4917.

MISCELLANEOUS

Nintendo Game Cube, like new, with two controllers \$50. Portable, 6-inch color monitor screen attaches to Playstation 2, \$60. E-mail [kathy.cheek@ece.gatech.edu](mailto:kathy.cheek@ece.gatech.edu) or call 770-975-3794.

Neon Marilyn Monroe poster, “Boulevard of Broken Dreams,” painted by Helnwein. She is outlined in pink neon. 24" x 36" x 3" in black wood frame. \$40. Call 894-1390 or e-mail [bruce.henson@library.gatech.edu](mailto:bruce.henson@library.gatech.edu).

Storm door, white aluminum w/brass handle and dead bolt. Left hinge. Full glass w/screen. Paid \$249, sell for \$125. Photos available. Call 678-232-3475 or e-mail [david.gifford@gtri.gatech.edu](mailto:david.gifford@gtri.gatech.edu).

Lithonia resident looking for someone to carpool with. Work hours can be anytime between 7 a.m. and 5 p.m. Willing to share costs. Call 894-1942.

New, gas-powered leaf blower. Moved to townhouse, must sell. \$75. Call Bob at 678-478-2142.

1999 Starcraft Stardust pop-up camper. Used fewer than 10 times. Sleeps eight. Excellent Condition. \$4,000. Call 770-528-7069 or e-mail [al.vineyard@gtri.gatech.edu](mailto:al.vineyard@gtri.gatech.edu).

Two \$20 Virgin Mobile ‘Top-Up’ cards, for Virgin mobile phone minutes. \$30 OBO. Call 894-5544 or e-mail [pat.barton@dev.gatech.edu](mailto:pat.barton@dev.gatech.edu).

The classifieds are a free service provided to members of the faculty and staff. To submit an ad, e-mail the text to [editor@icpa.gatech.edu](mailto:editor@icpa.gatech.edu). Due to the volume of submissions, it may take several weeks for ads to appear in print.