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# The WHISTLE



Georgia Institute of Technology

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## Tech home page gets fresh look

The electronic gateway to Georgia Tech has a more contemporary look with Friday's unveiling of the new Georgia Tech home page on the World Wide Web. The design is the fourth home page in Tech's history and the first revamp since the fall of 1996.

"A new school year, the national Roll Out of the Capital Campaign, and improved ease of use were all factors in the new design," said Bob Harty, executive director of Institute Communications and Public Affairs. "The new look is more audience responsive, technologically sophisticated and easier to access. It should more easily guide our users through the Georgia Tech Web."

The new design is functionally and visually different. Functionally, it has new buttons and categories, and features new pages that link directly to the home page. One of the new home page links is "Economic Development," which takes users into the Economic Development Institute and related areas. "A button on the home page emphasizes the importance of our economic development responsibilities and makes it easier for those unfamiliar with Tech's services to access them," Harty said.

Another new feature is the direct link to a Georgia Tech application for admission. "One of the most important audiences for the home page is prospective students," said Harty. "Recent surveys indicate that high school students are increasingly using the Internet as a source for researching their college choices. It's important that our site address this reality by being visually compelling, downloading quickly and being simple to navigate. We hope this design fulfills those requirements."

Visually, the page is a significant departure. It features a more sleek look, which draws the eye left to right across the top arc of the page, with dual icons of the Tech seal and the Kessler campanile; shots of academic research, student life and athletics; and pop-up photography relating to the categories featured on the home page. The photos will be updated regularly and will synchronize with the seasons and the campus calendar. For instance, the football photo on the right side of the page will be replaced by men's basketball.

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## Two Tech R&D projects garner NIST awards

Victor Rogers

Institute Communications and Public Affairs

The National Institute of Standards and Technology (NIST) has tapped Georgia Tech to help find solutions to two challenges facing the electronics packaging industry.

NIST awarded a four-year, \$9.9 million grant to Xerox Palo Alto Research Center (PARC), MicroModule Systems and Georgia Tech to develop a new "micro-spring" interconnect technology for testing and packaging microelectronic devices. In a separate three-year, \$5.7 million project, National Semiconductor Corporation, National Starch and Chemical, and Georgia Tech will create new bonding materials for faster, more cost-effective chip packaging. Both awards are funded through NIST's Advanced Technology Program that provides cost-shared funding to industry for high-risk R&D projects with the potential to spark important, broad-based economic benefits for the nation.

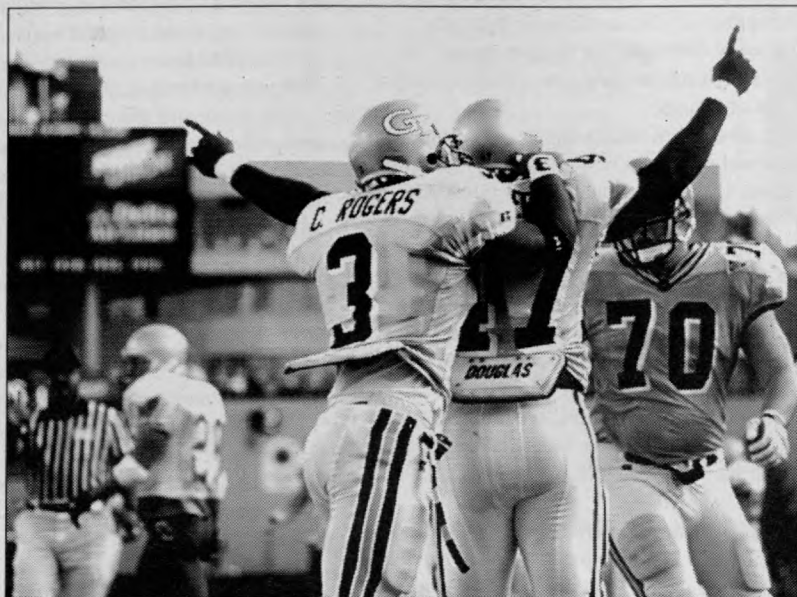
The micro-spring project will address two important bottlenecks in the semiconductor industry, according to Suresh Sitaraman, principal investigator and assistant professor in the Woodruff School of Mechanical Engineering. "Microelectronic devices are used in automobiles, computers, telecommunication equipment, appliances, aircraft, medical equipment—practically everywhere," he said. "Unlike any other industry, the electronics industry has demanded, over the past few years, continued reduction in size and increase in power, performance and input/output connections, without sacrificing reliability or increasing cost."

The first challenge is in making sure the chips work before they are packaged. Because packaging costs are considerable, manufacturers like to test devices before they are packaged. To test a chip, the semiconductor die are probed with tungsten needles or other devices that send electrical power and signals to the device while it is still part of the silicon wafer. Methods to probe the thousands of interconnections have not kept pace with the growing complexity, resulting in the prediction that soon it may cost more to test the devices than to manufacture them.

Xerox (PARC), Georgia Tech and MicroModule Systems propose to model, design, fabricate and test durable, cost-effective test and

See NIST, page 2

## Yellow Jackets hit top 25



Tech football is on the board with a No. 25 ranking in the country. There's no doubt that Yellow Jacket fans are relishing the recognition and excitement surrounding Tech's position in the polls.







## It starts with ...

### Empathy

"It would be impossible to pinpoint my most memorable volunteer experience—I've had a million of them. Perhaps counseling a female student from Spelman College who had been brutally raped, and having to call her parents in Detroit and break the news to them. Or maybe one Christmas when I took toys and food to a destitute mother and her children. Seeing the joy and tears at the same time has been recalled each Christmas time since. It's rewarding to take communion to an elderly person in a nursing home and let them talk about the past. I've had so many 'Kodak moments' that I couldn't begin to list them all."

Rita Bryan is administrative manager of the School of Earth and Atmospheric Sciences. She has a long list of volunteer offices and activities to her credit. Many of her volunteer interests share one common characteristic—a deep sense of empathy for the recipients. She counsels sexually abused children and rape victims, and ministers to the sick through her church. She's been active in many of the Georgia Tech volunteer activities including the Rape Crisis Line, the (GT)<sup>2</sup> Club and the Olympics.

"The mission for any organization of volunteers is to fill a void, provide a service, lend a new perspective to a situation and to try to make something better. I take part in whatever the situation calls for. There is a lot of diversity, commitment and expertise in each facet of my volunteer work. For instance, dealing with sexually abused children is much different than walking to raise money for the March of Dimes."

"Volunteerism has affected and changed me. First of all, it has made me aware of the sadness that can engulf a family to the point of total devastation. When I witness these kinds of situations, I thank the dear Lord for being so lucky to have a united, close family circle. And, I don't take my family or friends for granted, I let them know how cherished they are. I try to be a better person and to live each day in thankfulness and humility."



**Bud Sears (left) and J.W. Dees, this year's co-chairs for the retiree campaign, sign stacks of letters to encourage participation among their peers.**

### Leadership

"As an educator, I strive to inculcate the pluses of volunteering through example rather than coercion such as extra credit in my classes (although that does work!). There are so many needy agencies, people and causes in Atlanta, and there is no dearth of ways to contribute. I truly believe that we have a duty to contribute to those in the greater community. This enhances—in tangible and intangible ways—what we have in our community. If folks would volunteer just once, they would see, feel and understand what volunteering is all about."

Billiee Pendleton-Parker, assistant director of the Center for the Enhancement of Teaching and Learning (CETL), started volunteering at a young age when her parents impressed on her the importance of giving. Her childhood is filled with volunteer activities, including trick-or-treating for UNICEF, candy-stripping at a local hospital, selling poppies for the Junior American Legion Auxiliary and leading a toy drive for her high school science club.

As an adult her commitment remains unwavering. She serves on the steering committee for TEAM Buzz Community Service Day (see box on page 3), on the board of directors for the Dr. Ronald E. McNair Foundation, and on the board for the AIDS Survival Project. She serves on the organizing committees for the breast cancer Race for the Cure, Atlanta AIDS Walk, Run Over Cancer and America Walks for Strong Women. She volunteers at two nursing homes and is an advisor to several student groups.

"It's great to see and feel the immediate bonding among volunteers when you show up for 'duty' on a project. There's an instantaneous kinship among those who are giving of their time and talents. It's quite phenomenal and infectious, even to those first-time volunteers. One person can and does make a difference. One of my favorite quotes is by actress Helen Hayes: 'To rest is to rust.' I encourage [everyone] to be part of the solution."



### Home page, continued from page 1

women's volleyball or other sports throughout the year.

According to Harty, the new page was not designed in a vacuum. "The Web is a marvelous means of gauging client satisfaction," he said. "Users have supplied ongoing feedback over the last 18 months, and the old page evolved in response to those comments. The new page—with the direct application to Tech, more photography, a campus map and a more elegant design—is a reflection of the most consistent user suggestions. On average, we respond to more than 300 Webmaster e-mails per month," said Harty. "That's a tremendous source of direct client feedback, and we try to be very cognizant of our users' observations."



### The Whistle

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### NIST, continued from page 1

packaging technologies based on a novel micro-spring technology. The project is supported internally by the Woodruff School, the Packaging Research Center (PRC), the Manufacturing Research Center (MARC) and the President's Office.

"These micro-springs can be made as small as the width of a few microns—more than 10 times narrower than a human hair," said Sitaraman. Because the springs are fabricated using thin film processes that were originally developed for semiconductors, it costs the same amount to fabricate one spring on a probe card as it does to fabricate millions of springs.

The second challenge arises when silicon devices and components heat up due to environmental conditions or during operation, causing thermo-mechanical stresses to develop in the package when different parts expand at different rates. Researchers are hopeful that a new, inexpensive package can be created with thousands of interconnecting springs that relieve these stresses. The micro-spring is one of a few devices that can be used both for probing and packaging.

"We are very pleased that Dr. Sitaraman's important work on the modeling and reliability of advanced electronic circuit interconnect technology has been recognized by this award from NIST," said Ward O. Winer, chair of the Woodruff School. "It is further acknowledgment of the relevance of frontier industrially relevant, yet fundamentally significant research in the Woodruff School of Mechanical Engineering."

In the second NIST project, National Semiconductor Corp. will lead the research to develop new bonding materials. National Starch and Chemical is a joint-venture partner; and the PRC will evaluate the lowest cost of the materials developed. The program is called the Novel High-performance Wafer-level Reworkable Underfill Materials for Flip-chip Packaging. Researchers will create a fast-

Harty hopes that other campus units will adopt a look similar to the Tech home page in order to improve audience perception of the Institute. "The Web brings together in one electronic space all of Tech's communications and dramatically highlights the discord in look, content and message throughout Tech communications. It's important to leave a common impression with our electronic visitors. I encourage anyone on campus to use the template for this page, and then customize it for their particular needs. Tech's major pages shouldn't be a clone of one another, but the goal should be for our main pages to look like they all originate from the same institution."

curing underfill material and develop a process that cuts manufacturing time and reduces material and processing costs.

Current epoxy-based underfill materials, applied at the individual package level, take so long to process that they become a bottleneck for high-volume production. The new materials are expected to provide better bonds for flip-chip packages to a substrate on a printed circuit board. In addition, the research will create ways to deposit that material across the whole wafer in one pass before individual chips are separated from the wafer. This batch processing of entire wafers will be faster and more cost effective than encapsulating each packaged chip individually as is done now.

"The success of this process and materials will save 40-50 percent of the current semiconductor packaging cost, which is one-third of the total integrated circuit component," said C.P. Wong, principal investigator, professor in the School of Materials Science and Engineering, and a research director at the PRC.

"The materials technology being developed in this collaborative program ... will reduce silicon wafer processing time from hours to minutes," said Ashok Saxena, chair, School of Materials Science and Engineering. "The opportunity to work on some of the most important and challenging problems in the electronics industry will also have tremendous educational value for our graduate students."

"The savings will be hundreds of millions of dollars per year for U.S. integrated circuit companies," said Wong. "More importantly, the U.S. can gain back all of the integrated circuit packaging jobs lost to manufacturers in the Far East, returning thousands of high-paying IC jobs to the U.S."

Both NIST projects explore new technologies and new approaches to packaging. "That's what packaging is all about—how to put together semiconductors and electronics in such a way that makes products more compact and lightweight, and still handle the high-performance requirements," said Carl Rust, associate director, PRC.



## Proposed changes in Tech's statutes, bylaws to go before General Faculty Assembly

The Executive Board has approved four changes to the Statutes and Bylaws of Georgia Tech. These will be submitted to the General Faculty Assembly for a first reading during the Oct. 27 meeting at 4:30 p.m. in the Van Leer auditorium. The changes are itemized below. The current Statutes and Bylaws can be found on the Web at [www.gatech.edu/handbook/Contents/twoTOC.html](http://www.gatech.edu/handbook/Contents/twoTOC.html).

### Item 1

Eliminate the Faculty Public Relations Committee because the duties of this committee are now effectively accomplished by Institute Communications and Public Affairs.

Action: Eliminate the following sections from the Bylaws:

2.8.1.7.(c) Public Relations

2.8.1.7.(c).(1) The Public Relations Committee shall consist of four General Faculty members elected by that body; the administrator in charge of public relations; the administrator in charge of publications; and one student with at least junior standing elected jointly by the Student Council and the Graduate Student Senate. The Chair shall be elected annually by the Committee from among the elected nonadministrative General Faculty members. The Secretary shall be appointed by the Chair from among the other members.

2.8.1.7.(c).(2) The Committee shall annually review and make recommendations to the General Faculty concerning the policies and procedures involving the community, among which are public relations, official publications, the Placement Center, Alumni and official ceremonies of the Institute.

2.8.1.7.(c).(3) The Committee shall annually review and make recommendations to the President concerning the policies and procedures involving the use of institutional facilities for events not sponsored by the Institute.

### Item 2

Add the Student Computer Ownership Committee as a Standing Committee of the Academic Faculty because the duties of this Committee are now permanent and its membership should be elected by the Academic Faculty.

Action: Add the following sections to the Bylaws:

2.8.1.7.(o) Student Computer Ownership Committee

2.8.1.7.(o).(1) The Student Computer Ownership Committee shall consist of five members of the Corps of Instruction elected from the Academic Faculty, one full-time student of freshman standing elected by the Student Council, one other full-time student elected by the Student Council, one representative from the Office of Information Technology, one representative from the Georgia Tech Computer Store, and one representative from Auxiliary Services representing the Residential

Networking group, with all members having voting privileges. The Chair shall be elected annually by the Committee from among the elected Academic Faculty members. The Secretary shall be appointed by the Chair from among the other members.

2.8.1.7.(o).(2) The Committee shall define and periodically review and update (at least annually) the standard hardware specifications for a minimally configured student computer.

2.8.1.7.(o).(3) The Committee shall originate or receive all requests to add or delete specific software from the standard software suite used by the Georgia Tech community. It shall make recommendations to the Academic Faculty regarding any significant modifications to the standard software suite. It shall make, at its own discretion, any minor modifications and/or revisions to the standard software suite.

2.8.1.7.(o).(4) The Committee shall conduct an annual review of all student computer support procedures, originate or receive all requests to modify these procedures, make recommendations for minor changes or revisions to the appropriate Administrative unit, and make recommendations for any significant changes to the Academic Faculty.

2.8.1.7.(o).(5) The Committee shall originate or receive and make recommendations to the Academic Faculty regarding any changes or modifications to the Student Computer Ownership policy.

2.8.1.7.(o).(6) The Committee shall assist in the establishment and promotion of activities that encourage the use of computers in education. When needed, the Committee shall make appropriate recommendations to the Academic Faculty or to the relevant Department of Instruction.

### Item 3

Specifically state that "Academic Professionals" are members of the General Faculty under the Corps of Instruction. Academic Professionals have been defined by the Board of Regents in the Academic Affairs Handbook, Section 4.01.06 (see [www.peachnet.edu/admin/accaff/handbook/section4/4.01/4.01.06.html](http://www.peachnet.edu/admin/accaff/handbook/section4/4.01/4.01.06.html)).

Action: Amend the Statutes to read:

2.4.1.1.(a).(3) Other full-time extension personnel, duly certified librarians, Academic Professionals, and other teaching personnel with such other titles as may be approved by the Board of Regents.

### Item 4

Create a new General Faculty membership category called "Professional Classified Staff."

Action: Add the following sections to the Statutes:

2.4.1.1.(c) Professional Classified Staff

2.4.1.1.(c).(1) Persons in professional positions that require at least a master's degree or its equivalent in education and experience in a relevant field and are approved by the President.

## Calling all volunteers: TEAM Buzz is back

TEAM Buzz Community Service Day returns for its second year on Nov. 14. This year's planning committee encourages all faculty and staff to participate to "help make service a Tech tradition."

There are a variety of projects for more than 2,000 volunteers, including Habitat for Humanity, Atlanta Community Food Bank and Product Rescue Center, Edgewood Community Garden Club, Jerusalem House, Reynoldstown Revitalization, Northside Shepherd's Spinal Center, Goodwill Industries, Park Pride, St. Vincent De Paul, Trees Atlanta, American Red Cross, and the Scottish Rite Festival.

Volunteers may register as individuals or groups, or a group may be made up of friends, a department, school or organization. Registration continues from Oct. 19 - Nov. 11. Participants may register at [www.gatech.edu/teambuzz](http://www.gatech.edu/teambuzz) or call 894-2002.

#### Event schedule:

8 - 8:30 a.m.  
Kick-off Rally, Georgia Tech Plaza

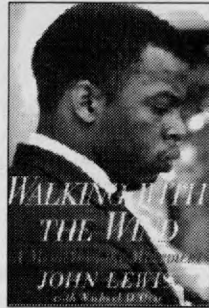
9 a.m. - 12:30 p.m.  
Service Projects

12:30 - 2:30 p.m.  
Celebration Party, Peter's Parking Deck

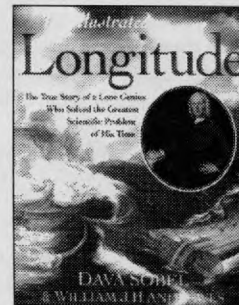
## Off the Bookshelf

O'Reilly publishers book fair. Lower level of Student Center, 10 a.m. - 2 p.m. 15 percent off all O'Reilly titles.

Congressman John Lewis will give a lecture and sign copies of *Walking With the Wind* on Oct. 27 from 12:30 - 2 p.m. at the Student Center Theatre. The event is co-sponsored by The Prometheus Club and the School of History, Technology, and Society.



Dava Sobel will lecture and sign her book *The Illustrated Longitude* (Walker & Co., \$29.95), on Nov. 5, 11 a.m. -



1 p.m., Student Services Building, Rm 117. Sobel will also award Longitude Contest Prizes, which include a hand-held GPS. E-mail [gigi.weinrich@bks.gatech.edu](mailto:gigi.weinrich@bks.gatech.edu) for details of the contest.

For more information or to reserve a copy of either of the books mentioned above, contact Gigi Weinrich, 894-1642 or [gigi.weinrich@bks.gatech.edu](mailto:gigi.weinrich@bks.gatech.edu).



# Campus EVENTS

## Brown Bags/Lectures

### Oct. 21

**Dr. Stephen Portch**, Chancellor of the University System of Georgia, will speak from 1 - 2 p.m., Rm. 117, Student Services Building. All faculty, staff, and students are encouraged to attend. He will discuss a variety of topics relating to higher education in Georgia. Contact: Andrew Harris, 894-1238.

### Oct. 22

**"Sound Design for Digital Environments: An Overview of the Work of the Gvu AudioLab,"** by James Oliverio, composer-in-residence. Noon, Pettit Building (MiRC), Rm. 102. For more information, call 894-4488, e-mail gvu-info@gvu.gatech.edu, or see [www.cc.gatech.edu/gvu/events/brownbag](http://www.cc.gatech.edu/gvu/events/brownbag).

### Oct. 23

**"Emotions, Memory and Brain,"** by Stephan Hamann, Emory University. Noon - 1 p.m., Student Center, Rm. 321. Contact: Sandra Key, 894-7865 or [sakey@cc.gatech.edu](mailto:sakey@cc.gatech.edu).

**"Field Determination of Hydrogeological Parameters in Everglades National Park,"** by Dr. David Genereux, Florida International University. 3 - 4 p.m., 209 Old CE Building. Contact: Sysan Ryan, 894-3893.

## Courses/Workshops

### Oct. 22

**Enhancing Your Presentation Skills through Power Point**, sponsored by the Professional Development Committee, Division of Student Affairs. Learn the basics of Power Point. 12:15 - 1:30 p.m., Student Services Building Rm. 117. Contact: [mack.bowers@vpss.gatech.edu](mailto:mack.bowers@vpss.gatech.edu).

**Grammar Goes to Work**. 8:30 a.m. - 1 p.m., Human Resource Development Training Rm. 302, Coliseum Annex. Cost: \$75. Contact: Wansley Dennis, 894-2249.

### Oct. 22, 29

**"Finding Funding,"** 10 - 11:30 a.m., Rm. 238, Centennial Research Building (CRB). Learn how to search special subscrip-

tion databases and the Internet for funding sources for research support, travel, etc. Oct. 29, learn how to use the **"National Science Foundation's FastLane"** system, 10 - 11:30 a.m., Rm. 238, CRB. For reservations, e-mail [jill.burkhalter@oca.gatech.edu](mailto:jill.burkhalter@oca.gatech.edu) or [dana.simpson@oca.gatech.edu](mailto:dana.simpson@oca.gatech.edu); or call 894-6947 or 894-6942.

### Oct. 26, 27

**WebCT JumpStart Sessions**, presented by CETL and OIT's Educational Technologies Directorate. Oct. 26, "Customizing WebCT Generated Pages," 11 a.m. - noon. Oct. 27, "WebCT Navigation and Organization," 11 a.m. - noon, and 1 - 2 p.m. All classes held in Rich Building, Rm. 242. For registration and scheduling information, see [webct.gatech.edu](http://webct.gatech.edu).

## Sports

### Oct. 24

**Georgia Tech vs. Florida State**. 7 p.m., Bobby Dodd Stadium at Grant Field, \$25. For tickets or more information, call 1-888-TECH-TIX or see [www.ramblinwreck.com](http://www.ramblinwreck.com).

## Miscellaneous

### Oct. 21

**Georgia Tech Women's Forum monthly meeting**. Noon, Pettit Building (MiRC), Rm. 102. Linda Odom and Scott Stooksbury, Wachovia Bank, will discuss finances, investing. Lunch will be served. Cost: \$4, members; \$5, non-members; \$1, drinks only. Contact: [maude.robinson@business.gatech.edu](mailto:maude.robinson@business.gatech.edu).

### Oct. 23-24

**Parents Association's Family Weekend**. For more information and registration materials, call 894-2732 or 1-800-GTALUMS.

### Oct. 27

**"State of the Institute Address,"** presented by President Clough, 4:30 p.m., Van Leer Auditorium. The address forms part of the fall meeting of the General Faculty. Immediately following the General Faculty meeting there will be a meeting of the elected General Faculty Assembly.

## Classifieds

### APPLIANCES

Refrigerator, Amana, white, freezer on top, icemaker, adjustable split glass shelves, less than 4 years old. \$450. Contact Bryan, 894-2188 or [bryan.dunn@gttri.gatech.edu](mailto:bryan.dunn@gttri.gatech.edu).

### AUTOMOBILES

1985 Oldsmobile 98 Regency Brougham, 95K miles, silver/burgundy, paint rough, reliable transportation, \$1,200 OBO, 894-4623.

1988 Toyota Corolla DX, 4 dr, red, 150K miles, A/C. Excellent condition. All service records. \$2,200 OBO. 770-569-2583 or [stephanie.allomong@conted.gatech.edu](mailto:stephanie.allomong@conted.gatech.edu).

1988 Honda Civic hatchback, red, 2-dr, 4-spd, cassette, a/c, excellent gas mileage, 2nd owner, \$1,500 firm. Call Tim, 607-1242.

1989 VW Cabriolet, 57K miles, 5-spd, loaded, \$5,500. Call 894-5478 or e-mail [tharris@at.gtaa.gatech.edu](mailto:tharris@at.gtaa.gatech.edu).

1989 Toyota Camry, 4 dr, auto, A/C, power windows/steering/brakes, cruise, 83K miles, AM/FM/tape. \$5,200. Contact 770-961-2688.

1991 Jeep Cherokee Larado 4X4. Fully loaded, auto, 97K miles. Single owner. \$6,200. Contact Steve Hays, 894-8083.

1992 Mercury Topaz, 4-dr, dove grey w/ light blue cloth interior, 38K miles, excellent condition, \$4,800. Call Sandra Pierotti, 894-7773.

1994 Toyota Corolla DX, white, 4 dr, power doors/windows, cruise, A/C, 81K miles. One owner. \$9,000 OBO. Contact Nancy Bowen, 894-2831 or [nancy.bowen@vpss.gatech.edu](mailto:nancy.bowen@vpss.gatech.edu).

1995 gold Saturn SL2. Leather int., ABS, traction control, keyless entry, AM/FM/tape, A/C, new tires, battery, 43K miles. \$10,700. Contact 894-2983 or [marilou.mycko@ee.gatech.edu](mailto:marilou.mycko@ee.gatech.edu).

1997 Burgandy Kawasaki ZX-1100 motorcycle. Only 2,700 miles, excellent condition. Asking \$8,000. Call Michelle, 485-3920.

### COMPUTERS

Mint condition Apple Centris 610 w/ 12" monitor. HP Deskwriter 520. Best offer. Contact 894-0569 or [david.sawicki@arch.gatech.edu](mailto:david.sawicki@arch.gatech.edu).

Macintosh PowerPC, 40 MB RAM, 2.1 GB hard drive. Hard drive, RAM less than 4 yrs old. \$500, incl. software that came with computer. Contact [suellen.robertson@ee.gatech.edu](mailto:suellen.robertson@ee.gatech.edu).

### FURNITURE

Black entertainment center, holds 32-inch TV, VCR, stereo, video tapes. Will deliver. \$80. Contact [carita.reynolds@mgt.gatech.edu](mailto:carita.reynolds@mgt.gatech.edu).

Teal leather sofa. Reclines on each end. \$150. Contact 675-1829 or [rick.howell@ee.gatech.edu](mailto:rick.howell@ee.gatech.edu).

Queen-size BR set, \$250. Sofa set, \$250. Also twin bed, entertainment center. See photos at [www.prism.gatech.edu/~yw6/furniture.html](http://www.prism.gatech.edu/~yw6/furniture.html). 770-491-3873 or [yw6@prism.gatech.edu](mailto:yw6@prism.gatech.edu).

For sale: Sleeper sofa, 2 years old, \$50, you pick up, haul away. Contact 875-5743 or [gary.hoilmann@ce.gatech.edu](mailto:gary.hoilmann@ce.gatech.edu).

Wanted: cradle or bassinet in great condition. Call Barbara, 894-5352.

Wanted: chest of drawers. E-mail [cm132@prsim.gatech.edu](mailto:cm132@prsim.gatech.edu).

Executive desk, solid cherry construction, \$850. Matching credenza, \$650. Two executive desk chairs, fabric worn but not shabby, \$150 each. Ed Curry, 894-0511 or [ed.curry@iac.gatech.edu](mailto:ed.curry@iac.gatech.edu).

### REAL ESTATE

For rent: 1BR garden apt., Vinings/Smyrna. Upscale neighborhood, no pets, \$625/month. Call 770-801-9929.

For rent: 2BR, 2BA townhouse, Marietta, 2 miles from Square, just refurbished. No pets. \$675/month. Call 678-945-9141.

For rent: 3BR, 2BA mobile home, Douglasville area, on 24 acres of wooded land. Rideshare to Tech possible. \$400-\$500/month. Contact [luther.ward@gttri.gatech.edu](mailto:luther.ward@gttri.gatech.edu) or 770-778-3223.

Roommate wanted: 1 room for rent in 3BR house in Home Park. A/C, washer, dryer, microwave. \$225 plus utilities. E-mail [cpelard@optica.mirc.gatech.edu](mailto:cpelard@optica.mirc.gatech.edu).

For sale: 3BR, 2.5BA 2-story traditional brick house in E. Cobb, 1/2 acre, cul de sac, lake view in back. \$162,000. 770-552-8029.

For sale: 3BR/1.5BA ranch. Near schools, I-20, I-285, Six Flags. Fenced yard, 2-car carport, central heat/ac. \$79,000. Don, 894-4235, 770-739-2948 or [don.alexander@facilities.gatech.edu](mailto:don.alexander@facilities.gatech.edu).

For sale: 3BR/2.5BA townhome, Marietta. 1.5 miles from I-75 at North 120 Loop. Deck w/ outside storage, newly painted inside, new water heater. \$99,900. Call 770-424-5473.

Housemate wanted: 3BR 3BA home in Cobb. 18 miles from Tech. Your own den, garage space, phone line. \$550/mo. plus 1/2 util. Call 770-739-7894 after 6 p.m. or page 722-7773.

### SPORTS/FITNESS/RECREATION

Men's K-2 inline skates (5 wheels) size 9.5. \$100 OBO. E-mail [katja.weber@inta.gatech.edu](mailto:katja.weber@inta.gatech.edu).

Hunting club needs members. NE Cherokee Co. next to McGraw Ford Mgn. Area. 535 acres. \$235/member incl. insurance. Pager 655-4329.

### MISCELLANEOUS

Traditional Japanese sword set (katana/tegatana/display stand), black hardwood sheaths, ornate handles, hilts. Still in boxes. \$100. Contact [dj57@pop.prism.gatech.edu](mailto:dj57@pop.prism.gatech.edu) or 770-730-9091.

Wanted immediately: Sitter for disabled mother. Mon - Fri only, near Lenox Square. \$7/hr. No experience necessary. Call Kate, 894-6826.

4 Cirque du Soleil tickets at cost (\$43.55 each). Aisle seats. For Oct. 31 performance. E-mail [thomas.winn@lcc.gatech.edu](mailto:thomas.winn@lcc.gatech.edu).

1958 juke box. Original exterior but plays CDs. Has great sound, impressive lighting and details. Must see to appreciate. Call Gary at 770-251-8302 or page at 770-556-2717.

Cast iron antique tub. 5 foot. Completely refinished. Gloss white with gold claw feet. Hard to find. \$850. 894-3638 or [andy@oip.gatech.edu](mailto:andy@oip.gatech.edu).

Wanted: Computer skills tutor for 8-yr-old and Dad. Basic Web-page construction, kid-CAD-CAM programs, etc. Sat. a.m., Morningside. \$20/hr. New 400 PC. Call Patrick, 894-6894.

Electric bass, combo amp. Ibanez Roadstar II, hardshell case, \$500. Crate BX-100 w/ 15" speaker, casters, \$300. Both for \$750. Randy Janka, 770-528-3165 or [randy.janka@gttri.gatech.edu](mailto:randy.janka@gttri.gatech.edu).

Digital answering machine/phone system. Bought new for \$100, will sell for \$25. E-mail [betsy.odonnell@sac.gatech.edu](mailto:betsy.odonnell@sac.gatech.edu).

*Editor's note: Faculty and staff may submit ads via e-mail to [denise.noble@icpa.gatech.edu](mailto:denise.noble@icpa.gatech.edu) or fax to Denise at 894-7214. Ads run for a maximum of three weeks, in the order in which they are received. For more information, call 894-8324.*