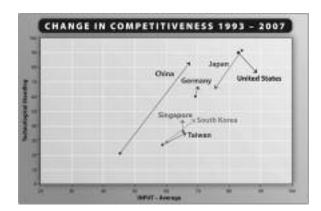
Inside:

WHISTLE

FACULTY/STAFF NEWSPAPER

Volume 33, Number 5 • February 4, 2008

THE GEORGIA INSTITUTE OF TECHNOLOGY



Tech study shows China in front as technology leader

John Toon Research News

new study of worldwide technological competitiveness suggests China may soon rival the United States as the principal driver of the world's economy—a position the U.S. has held since the end of World War II. If that happens, it will mark the first time in nearly a century that two nations have competed for leadership as equals.

The study's indicators predict that China will soon pass the United States in the critical ability to develop

basic science and technology, turn those developments into products and services, and then market them to the world. Though China is often seen as just a low-cost producer of manufactured goods, the new "High Tech Indicators" study done by Tech researchers clearly shows that the Asian

China's emphasis on training scientists and engineers—who conduct the research needed to maintain competitiveness—suggests it will continue to grow its ability to innovate.

powerhouse has much bigger aspirations.

"For the first time in nearly a century, we see leadership in basic research and the economic ability to pursue the benefits of that research—to create and market products based on research—in more than one place on the planet," said Nils Newman, coauthor of the National Science Foundation—supported study. "Since World War II, the United States has been the main driver of the global economy. Now we have a situation in which technology products are going to be appearing in the marketplace that were not developed or commercialized here. We won't have had any involvement with them and may not even know they are coming."

China continued, page 3

Caution: Construction ahead

Campus commuters to feel traffic strain as road is closed

Robert Nesmith Communications & Marketing

o less than two major road construction projects in the heart of Midtown will be well under way by summer, and commuters to Georgia Tech are starting to feel the pinch.

Road crews are preparing for a full reconstruction of the 14th Street bridge across Interstates 75 and 85, to begin in earnest this summer. Already crews have started working alongside the highway, clearing the way for two planned exit ramps to be added to the bridge.

To grant construction crews more space and give



On Feb. 9, Techwood Drive (shown facing north between 10th and 14th streets) from 16th to 10th streets will be closed to traffic, as part of the 14th Street Bridge improvement project. The road will be reopened in September 2009.

motorists a larger buffer for safety, one lane of Williams Street was closed in October. On Feb. 9, the Georgia Department of Transportation (GDOT) will close Techwood Drive between 10th and 16th streets, as well as the interstates' southbound 14th and 10th streets exit ramps.

"(These roads) won't
reopen until next summer,"
said GDOT spokesperson
Melany Reynolds "We're

said GDOT spokesperson Melany Reynolds. "We're closing Techwood for demolitions, space and for safety

Traffic continued, page 3

Cleveland remembered, respected by his peers

harles Cleveland, who joined the School of Physics in 1979 as a member of Physics Professor Uzi Landman's research group, played a key role in the establishment of the Georgia Tech Center for Computational Materials Science.

In his field, Cleveland helped further the science of investigating nature on a microscopic level, later turning his research to the underlying development of cancer.



Charles Cleveland had worked as a Tech researcher since 1979.

A senior research scientist, Cleveland died Sunday, Jan. 27, after battling pancreatic cancer for the last 17 months.

A graduate of Tech, Cleveland earned his doctoral degree under the guidance of Professor Hal Gersch. For a year, prior to joining Landman, he taught physics at the University of North Carolina in Greensboro.

"Dr. Charles Cleveland was a gifted scientist, endowed with exceptional analytical and numerical skills,"

Cleveland continued, page 2

COMM works with partners to promote Institute's excellence

he new year has marked the advent of an entirely new organization on campus.

With an ambitious mission and powerful new capabilities, Georgia Tech Communications & Marketing (COMM) is now open for business.

Communications & Marketing is a key part of a broader effort to redefine and expand Georgia Tech's capacity to communicate and compete at the national level in the increasingly competitive world of higher education. With this change, Institute Communications and Public Affairs (ICPA) passes into history.

Communications & Marketing is the Institute's professional communications and marketing resource. Its purpose is to promote the Institute's excellence and provide world-class communications and marketing support to the Georgia Tech community.

"We have developed 21st-century

COMM continued, page 2

"You want to put the flame inside? That's a first. You'd have a fair bit of heat and you'd have to deal with the air quality, but I guess it can be done. But it will be expensive."

Research engineer and mechanical engineering Professor Sam Shelton, when questioned about putting the perpetually burning Olympic cauldron inside the domed venue at the 2010 Vancouver Olympic Games. Shelton helped design the cauldron for the 1996 Centennial Olympic Games in Atlanta. (Vancouver Sun)

COMM, cont'd from page 1

capacity to support our outstanding faculty, students and staff in their efforts to build and strengthen our reputation within the state of Georgia and worldwide," said Associate Vice President James Fetig. "We have the

COMM Mission

Position Georgia Tech as the defining technological research university of the 21st century and to strengthen its brand identity within the Institute, the state of Georgia, the United States, and around the world.

Communications & Marketing partners with campus stakeholders and clients in order to achieve mutual success.

capacity to apply communications and marketing capabilities in ways that will make measurable contributions to the future success of the Institute."

Communications & Marketing is passionate about improving communications at Georgia Tech. Toward this end, the unit has added or strengthened its expertise and capacity in internal and student communications, public relations, event planning, marketing communications and community outreach. Its comprehensive capabilities include:

- Marketing and communications planning
- Market research
- Brand management
- Creative design services, including graphic design, photography, editorial services, video production and Web development
- Campaign communications
- Internal communications
- Event planning
- Trademark and licensing management
- Community relations

"We hope to help all units on campus integrate their communications efforts toward the common goal of differentiating the excellence of Georgia Tech from all others. We will measure our success by your success," Fetig said.

Cleveland, cont'd from page 1

Landman said. "His professional contributions are marked by a unique capability to devise methods for analysis and visualization of complicated patterns, (as well as) the unique talent to develop and implement efficient and reliable computational techniques."

Some elements of his research included the development of computational methodologies that enabled microscopic examinations of nature, as well as contributions to the understanding of complex problems in a broad spectrum of fields, ranging from melting materials, atom arrangement in nanoscale crystals, the nature of collisions of clusters with solid surfaces, the kinetics and dynamics of crystal growth and electrons attached to nanodroplets of water.

Since 2001, he had worked on explaining properties in the damage of DNA, implicated as the source for chemical changes underlying the development of cancer. His work appeared in more than 65 publications, which in turn gathered more than 3,000 literature citations.

"Charles' insights into complex scientific problems, his devotion to rigor and his hard work were overshadowed only by his friendship, warmth and commitment to his colleagues," said Provost Gary Schuster.

At the Center for Computational Materials Science, Cleveland's research centered on the nature of materials, with an emphasis on the microscopic origins of chemical and physical behavior. He also managed and was responsible for the computational resources of the center, and facilitated the research of a number of faculty members and students.

"He earned the respect of his peers, faculty and students alike as a bright, original, helpful, kind and compassionate colleague, who-along with his own research activities-worked selflessly to promote and foster the works of others," Landman said.

Landman calls ironic that some of Cleveland's work was accepted for publication the day he received his cancer diagnosis. During 17 months of treatment, which included 28 cycles of chemotherapy and a short course of radiation, Cleveland continued to work. He was treated by the MD Anderson Cancer Center in Houston and Georgia Cancer Specialists in Atlanta. In an effort to foster pancreatic cancer research, he donated his body to Johns Hopkins Hospital Pancreatic Center Rapid Tissue Donation program.

A memorial service was held Saturday, Feb. 2, at Sandy Springs Christian Church. He is survived by his wife, Sara; their two "swamp collies"; a cousin, Marion Bradford, and his wife, Janet Bradford, of Hendersonville, N.C., and a cousin, Beth Bradford of Rome, Ga.



WHISTLE

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Communications & Marketing Wardlaw Center 177 North Avenue Atlanta, Georgia 30332-0181

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

Library's Walters lends experience to digital registry

Robert Nesmith Communications & Marketing

ibrary and Information Center Associate Director Tyler Walters has been helping to establish governance protocols for the internationally focused Global Digital Format Registry (GDFR), an organization

seeking to future-proof digital

archived files. Spearheaded by the Harvard University Library, the GDFR is establishing an international protocol and database for creating and accessing information on digital file formats, so that future researchers will still have access to the files created

today. "It's a registry of technical information about digital formats of any and all kinds," said Walters, associate director for Technology and Resource Services. "For example, you look on the Internet (today) and you view a jpeg (image). This archive would house all the methods of how to create that jpeg, so that 100 years from now, the knowledge



Tyler Walters

won't be lost." Another example Walters used is a researcher trying to open a 2003 Word document 50 years from now. "Over time, the information on how to create these files and images could be lost. We're ensuring that what we're doing today can be replicated and accessed tomorrow."

The Registry started in 2006 with a grant to the Harvard Library from the Andrew W. Mellon Foundation. This effort has grown considerably, as more than 10 countries are represented. November's meeting-sponsored by the National Archives and Records

Administration-was the first in which governance was discussed.

"Because the digital world is different, it stands that governance would be different," Walters said. "How do we govern something like this, with a lot of different governments and institutions coming together? How do we come together with no partner more important than the other? All the stakeholders need to be equal in this. The key element is building trust."

While the GDFR was spearheaded by the Harvard Library, other organizations and countries have started archiving this information on their own, prompting the need for collaboration and governance. Walters and the other attendees—which included representatives from institutions such as the Library of Congress, National Archives, the Sweden Statens Arkiv, the National Library of New Zealand and NASA-are working to establish a model and instill agreements between the participating groups. "We're investigating structures that are similar, seeing how they work," Walters said, citing the International Internet Preservation Consortium as an example.

Walters is involved because of his previous work in establishing the etaArchive Cooperative, an international, six-university digital preservation consortium, which has a strategic relationship with the Library of Congress. "For the last four years, I've helped to organize cooperatives (such as this)."

Although no dates have been set, Walters said he will participate in future meetings.

For more information...

Library & Information Center www.library.gatech.edu

Traffic, cont'd from page 1

purposes, mostly."

Reynolds said detours are already in place. Drivers traveling I-85 southbound should exit at 17th Street and travel to Spring Street, while those traveling southbound on I-75 should exit at Northside Drive, turning left on 10th Street to travel into Midtown.

"We are rebuilding the bridge, so it is going to have to come all the way down, unlike the Fifth Street bridge," Reynolds said. One new ramp will carry southbound traffic from the interstates to 10th Street while the other will exit northbound lanes at 17th. "These two new exit ramps will help relieve some of the congestion, when finished."

By mid-summer, GDOT will close the 14th Street bridge. Besides reconstruction, some of the \$88.5 million project's improvements include pedestrian-friendly sidewalks and dedicated turning lanes. May 2010 is the projected completion date.

At the same time, GDOT plans to resurface nearly five miles of the Interstate 75/85 Connector, starting in March with a scheduled completion date of November 2008. Lane closures will be limited to evenings and weekends, ending Mondays at 5 a.m.

All of this means commuters and travelers in Midtown will be vying for space on fewer available roads. Some tips offered to businesses and those working in the area include altering travel times to



Afternoon traffic stacks up at the intersection of Techwood Drive and 10th Street. Starting Feb. 9, these drivers will need to find another route.

the Midtown area, carpooling or finding alternate routes of transportation. Reynolds said the GDOT is working with the city of Atlanta to synchronize traffic signals for roads around the construction.

"It's going to be an inconvenience," Reynolds said. "But after the first two weeks, things will calm down as people get used to it."

For more information...

Georgia Department of Transportation

www.dot.state.ga.us

Commuting solutions

www.CleanAirCampaign.com

Midtown Alliance

www.14thStreetBridge.com

China, cont'd from page 1

Georgia Tech has been gathering the high-tech indicators since the mid-1980s, when the concern was which country would be the "next Japan" as a competitive producer and exporter of technology products. The current "HTI-2007" information was gathered for use in the NSF's biennial report, "Science and Engineering Indicators," the most recent of which was released Jan. 15.

Georgia Tech's "High Tech Indicators" study ranks 33 nations relative to one another on "technological standing," an output factor that indicates each nation's recent success in exporting high-technology products. Four major input factors help build future technological standing: national orientation toward technological competitiveness, socioeconomic infrastructure, technological infrastructure and productive capacity. Each of the indicators is based on a combination of statistical data and expert opinions.

A chart showing change in the technological standing of the 33 nations is dominated by one feature—a long and continuous upward line representing China's move to world technological leadership over the past 15 years.

The 2007 statistics show China with a technological standing of 82.8, compared to 76.1 for the United States, 66.8 for Germany and 66.0 for Japan. Just 11 years ago, China's score was only 22.5. The United States peaked in 1999 with a score of 95.4.

"China has really changed the world economic landscape in

technology," said Alan Porter, another study co-author and co-director of the Georgia Tech Technology Policy and Assessment Center, which conducted the research. "When you take China's low-cost manufacturing and focus on technology, then combine them with the increasing emphasis on research and development, the result ultimately won't leave much room for other countries."

The United States and Japan have both fallen in relative technological standing—though not absolute measures—because of the dramatic rise of China and other "Asian Tigers:" South Korea, Singapore and Taiwan. If the increasingly integrated European Union were considered one entity instead of 27 separate countries, it would surpass the United States.

"As a percentage mover relative to everyone else, we have not seen a stumble for China," Newman said. "The gains have been dramatic, and there is no real sense that any kind of leveling off is occurring."

Recent statistics for the value of technology products exported—a key component of technological standing—put China behind the United States by the amount of "a rounding error:" about \$100 million. If that trend continues, Newman noted, China will shortly pass the United States in that measure of technological leadership.

China's emphasis on training scientists and engineers—who conduct the research needed to maintain technological competitiveness—suggests it will continue to grow its ability to innovate. In the United States, the training of scientists and engineers has lagged.

"For scientists and engineers, China now has less than half as many as we do, but they have a lot of growing room," Newman said. "It would be difficult for the United States to get much better in this area, and it would be very easy for us to get worse. It would be very easy for the Chinese to get better because they have more room to maneuver."

On the input indicators calculated for 2007, China lags behind the United States. In "national orientation," China won a score of 62.6, compared to 78.0 for the United States. In "socioeconomic infrastructure," China rated 61.2, compared to 87.9 for the United States. In the other two factors, China also was behind the U.S., 60.0 versus 95.5 for "technological infrastructure" and 85.2 versus 93.4 for "productive capacity."

China has been dramatically improving its input scores, which portends even stronger technological competitiveness in the future.

"It's like being 40 years old and playing basketball against a competitor who's only 12 years old—but is already at your height," Newman said. "You are a little better right now and have more experience, but you're not going to squeeze much more performance out. The future clearly doesn't look good for the United States."

For more information...

Technology Policy and Assessment Center www.tpac.gatech.edu

High Tech Indicators study www.tpac.gatech.edu/hti.php

IN BRIEF:

Four named AIMBE Fellows

The American Institute for Medical and Biological Engineering (AIMBE) named four College of Engineering faculty members as fellows. AIMBE Fellows are chosen for their contributions to teaching, research and innovation.

Biomedical Engineering Assistant Professor Julia E. Babensee, Chemical and Biomolecular Engineering Professor Andreas Bommarius, Electrical and Computer Engineering Associate Professor Robert J. Butera and Biomedical Engineering Regents' Professor Cheng Zhu will be inducted at The Global Impact of Medical and Biological Engineering Feb. 20–22.

Coyle joins ECE faculty

Ed Coyle, a 25-year faculty member at Purdue University, was named the Arbutus Chair in Distributed Engineering Education in the School of Electrical and Computer Engineering.

He received his bachelor's in electrical engineering from the University of Delaware in 1978, and his master's and doctorate from Princeton University in 1980 and 1982, respectively. His research interests include computer and sensor networks, signal and image processing, and engineering education.

Coyle is the director of the Arbutus Center for Distributed Engineering Education and a Georgia Research Alliance Eminent Scholar. For more information, visit www.ece.gatech.edu.

Management makes 'Global 100'

Tech's College of Management placed 69th on the list of "Global 100" MBA programs that effectively incorporate social issues and sustainability into both class and research initiatives.

The Aspen Institute Center for Business Education compiles the Beyond Grey Pinstripes "Global 100," a biennial ranking of business schools. For more information, visit **www.mgt.gatech.edu**.

Never too late to plan

During February and March, individual counseling sessions will be open for faculty and staff members to meet with TIAA-CREF consultants.

In March, the Office of Human Resources presents a series of retirement presentations to address Social Security, Institute retirement plans, Teachers Retirement System benefits, and Optional Retirement Plans.

For more information and appointment dates, visit **www.ohr.gatech.edu**.

Proposals sought

The National Science Foundation seeks proposals for its Integrative Graduate Education and Research Traineeship (IGERT) program, which seeks to enhance the interdisciplinary backgrounds of U.S. doctorate-holding scientists and engineers who pursue careers in research and education.

Both IGERT Traineeship and IGERT Resource Center proposals are sought, with a deadline of Feb. 29 to the Tech faculty committee. For more information, visit **www.nsf.gov**. Submit proposals to kathy.garcia@carnegie.gatech.edu.

ILRC update

The Institute has amended its request of \$50 million from the state Legislature for the Innovative Learning Resource Center to \$10 million for Fiscal Year 2009. During the week of Jan. 28, President Wayne Clough met with leaders of the State House of Representatives to discuss the request and ask for their support.

C A M P U S E V E N T S

Arts & Culture

Feb. 5

The School of Literature, Communication and Culture's Science Fiction Film Series continues, with "THX 1138" (1971), a dystopian futuristic tale from "Star Wars" creator George Lucas. For more information, visit www.lcc.gatech.edu.

Feb. 7

Associate Director of Poetry@Tech Travis Denton introduces the McEver Poets, Laure-Anne Bosselaar, Bruce McEver and Opal Moore, from 4:30 to 6 p.m. in the Clary Theatre, at the Student Success Center. For more information, visit www.poetry.gatech.edu.

Feb. 12

Sonic Generator, the Institute's resident chamber music ensemble, will hold a performance at the Georgia Tech Alumni House at 8 p.m. For more information, visit www.sonicgenerator.gatech.edu.

Feb. 15

The Ferst Center for the Arts presents blues-based pianist McCoy Tyner and his trio with choreographer and tap dancer Savion Glover. Tickets are \$40 and \$50, and subscription-based tickets are \$32 and \$40. For more information, visit www.ferstcenter.gatech.edu.

Feb. 16

Chemical and Biomolecular Engineering Associate Professor Pete Ludovice hosts "Pocket Protectors and Other Fashion Statements," at 8:30 p.m. at the Relapse Theatre on 14th Street. The event is sponsored by the MIT Alumni Club of Atlanta. For more information, visit www.drpetecomedy.com.

Conferences & Lectures

Feb. 6

The Innovations in Economic Development Forum welcomes Macquarium Intelligent Communications' Jarrett King, who presents "Treasure Hunting through Geocaching—Is there an Economic Development Opportunity?" from noon to 2 p.m. in the Hodges Conference Room, at the Centergy Building@Tech Square. For more information, visit www.cherry.gatech.edu.

Jeff Mango, president of the Georgia/Alabama region for Verizon Wireless, will be featured at the College of Management's IMPACT Speaker Series,

from 4:30 to 5:30 p.m. in the LeCraw Auditorium of the Management Building. For more information, visit **www.mgt.gatech.edu**.

University of California–Berkeley researcher Ignacio Taboada presents "High Energy Neutrinos from Gamma-Ray Bursts with IceCube," at 3 p.m. in Howey Physics Lecture Room 5. For more information, visit www.physics.gatech.edu.

Feb. 7

Dennis Bushnell, chief scientist at NASA's Langley Research Center, presents "Futures of Energetics," at 11 a.m. in room 442 of the Guggenheim Building. For more information, visit www.ae.gatech.edu.

Feb. 9

The College of Architecture presents its 2008 Dean's Symposium, "The Duomo of Santa Maria Del Fiore: The Legacy of its Construction," from 8:30 a.m. to 5 p.m. in the Architecture Auditorium. The symposium will be moderated by Associate Dean Sabir Khan. For more information, visit **www.coa.gatech.edu**.

Faculty/Staff Development

Ongoing

The Office of Organizational Development offers a Web-based tutorial on the basics of using a state purchasing card (p-card). To register, visit **www.trainsweb.gatech.edu**.

Techmasters—Tech's chapter of Toastmasters International—meets every Thursday at 7:30 a.m. in room 102 of the MRC. For more information, visit www.techmasters.gatech.edu.

The Georgia Tech Faculty Women's Club offers scholarships for undergraduate students who are children of faculty members. Scholarship amounts range from \$500 to \$1,500. Applications are due by March 1. For more information, visit **www.gtfwc.gatech.edu**.

The Office of Organizational Development is offering the Emergency Preparedness Certificate, which consists of several smaller courses, including "Fire Safety," "Facilities Hazard Training" and "Basic First Aid/Adult CPR/AED." For more information on scheduling, visit **www.orgdev.gatech.edu**.

The Center for the Enhancement of Teaching and Learning is accepting nominations for three awards: The CETL/BP Junior Faculty Teaching Excellence Award, the CETL/BP Outstanding TA Award and the Education Partnership Award. Nominations are due Feb. 4. For more information, visit **www.cetl.gatech.edu**.

Through Feb. 5

The Honors Program is seeking both faculty members and proposals for Special Topics courses to be offered for the fall 2008 semester. Courses will engage students in exploring fresh questions without a specific set of requirements. Interested faculty members should secure tentative departmental approval. For more information, visit www.honorsprogram.gatech.edu.

Feb. 7

The Office of Organizational Development offers the Brown Bag course "An Introduction to Intercultural Communication," from 11:30 a.m. to 1 p.m. in room 308 of the Savant Building. For more information, visit www.orgdev.gatech.edu.

Marketing Director Katherine Bows, Student Communications Officer Sarah Mallory and Event Planner Laura Staub of Communications & Marketing present "The Georgia Tech Image and Marketing the Institute," from 6 to 8 p.m. in the Stein House study lounge of the 4th Street Apartments. For more information, visit www.wst.gatech.edu.

Through Feb. 8

The Institute's Data Cleanup encourages employees to locate and identify sensitive information which in turn would then be deleted or archived from their desktop computers. For more information, visit www.datacleanup.gatech.edu.

Miscellaneous

Feb. 11

Playwright and "The Vagina Monologues" contributer Eve Ensler will read from her new book "The Good Body," at 3:30 and 7 p.m. in the Richards Gallery of the Ferst Center for the Arts. For more information, visit

 ${\bf www.womenscenter.gatech.edu}.$

Feb. 12

School of Public Policy Assistant Professor Jennifer Clark will sign copies of her latest book, "Remaking Regional Economies: Power, Labor and Firm Strategies in the Knowledge Economy," from 5:30 to 6:30 p.m. at the Tech Bookstore. For more information, visit www.gatech.bncollege.com.

C L A D D I I

Automobiles

2005 Toyota Highlander V6 LE. 4WD, leather seats, moon roof, tow pkg., 6-disc CD player, running boards, good cond., 62,500 miles. \$18,500 OBO, 404-310-6085.

1999 Toyota Camry LE. Leather seats, good cond., ~63,800 miles. \$6,500 OBO. Call 404-310-6085.

93 Jeep Cherokee. 2D, auto, 6 cyl. Alpine stereo, exc. cond. All records since new. \$1,950. E-mail rusty.embry@gtri.gate-ch.edu or call 678-448-2167.

REAL ESTATE/ROOMMATES

3BR/1.5BA house for rent in Decatur area. 3 minutes to Decatur Square. W/D hookups. Quiet, private neighborhood. Recently rehabbed.

\$900/month. E-mail thania. cantave@carnegie.gatech.edu or call (404) 385-4027.

3BR/1.5BA home in East Atlanta for rent. Newly renovated in quiet neighborhood with fenced back yard. \$1,130 + deposit. Call 404-419-6674.

3BR/2BA peaceful, furnished, water-front cottage along the southern Outer Banks, N.C. \$150/day, 3-day min. Pets OK. Boat slip. More info: www.readymadeparties.com. E-mail jud.ready@gatech.edu.

2BR/2.5BA townhome for rent. Cross Creek condos. Small enclosed patio, swim, golf and tennis. Great location for Tech. \$1,150/month. Call Caroline at 894-2394.

1BR/1BA condo overlooking

the Smokies. Kitchen, living room w/ stone fireplace and balcony. 24-hour security, hiking trails, outdoor grills, pool & spa. Near Pigeon Forge, Dollywood & Sevierville. \$48,900. All cookware, furniture, appliances incl. E-mail realtorjackie@comcast.net for pics or call 678-489-4149.

1BR/1BA apt. in Home Park neighborhood available for Feb. 1. Off-street parking, ADT security, lots of storage space, washer/dryer, central heat/AC. Perfect for one or a couple. No pets. \$675 + deposit. 404-512-4618.

3BR/1BA renovated ranch. New appliances, includes W/D. \$1,200/month, utilities and yard maintenance included. Fenced back yard with a slate patio. Carport. Pets OK. 5 minutes from East Atlanta Village and Decatur. E-mail amberjohnson0965 @yahoo.com or call 404.822.9618. Pix avail.

SPORTS/FITNESS/RECREATION

All-terrain bicycle, 1992 Mongoose 7005. Shimano XT, Deore XT components. 21 gears, Iboc aluminum frame. Mint condition. \$450 (\$1,000 new). 404-355-2950 after 4 p.m. or 404-894-

2003 Honda CDR 954. Low miles, exc. cond. Includes 2 helmets, jacket, gloves, security chain and cover. \$7,500 OBO. Pics available. E-mail marilu.suarez@inta.gatech.edu.

FURNITURE/APPLIANCES

Futon w/ wood frame and

black cushion. Converts to full-size bed. Good cond. \$100. E-mail mora.hanlon@alumni.gatech.edu.

Broyhill solid pine entertainment center, \$150; 1 crib, ex. condition, \$75; 2 POS systems, \$200 each; Mitsubishi 61-in. HDTV, \$700. Pix avail. E-mail cathy.valero@ae.gatech.edu.

MISCELLANEOUS

In-home childcare available in Marietta for children 6 wks. to 3 yrs. Exc. references available. Call Kym, 678-560-4459.

Submissions appear in the order in which they are received. E-mail ads to editor@icpa.gatech.edu.