North Avenue Construction Rolls On

AMELIA PAVLIK  COMMUNICATIONS & MARKETING

With the work on the stadium side of North Avenue almost complete, Facilities is moving full steam ahead with completing the same upgrades to the other side of the road.

"Unfortunately, we couldn’t wait until after football season to complete the work," said Frank Lamia, associate director of Construction Services. "We didn’t want to pull the contractor off the project, because it would increase costs and delay completion."

Currently, the construction is impacting the sidewalk between Luckie Street (at the Hampton Inn) and Burge Parking Deck and includes the following improvements:

• Sidewalks will be reconstructed to match the campus standards outlined in the Campus Landscape Master Plan.
• The utilities will be moved underground to protect them and improve appearance.
• New trees will be planted.
• New street and pedestrian lighting will be installed to match campus standards outlined in the master plan.

Unlike the utility work on the north side of North Avenue, which was completed at night, all utility work on the south side will be completed from 9 a.m. to 4 p.m., so be prepared for lane closures.

“The logic behind the utility work being done at night was that the Georgia Power lines had to be relocated under North Avenue, so the Georgia Department of Transportation made Georgia Power complete this work at night,” Lamia said.

Once the work is completed, from Luckie to Burge, the section of the sidewalk from Burge to the Alumni/Faculty House will receive the same upgrades.

“In order to do this work, we need to take sections of the sidewalk out of service,” Lamia said. “We think that the way we are doing it is the least disruptive to the campus community.”

Since the North Avenue project continued on page 2

Census Data Center Is Valuable Resource

AMELIA PAVLIK  COMMUNICATIONS & MARKETING

When people think of the census, a treasure trove of data on everything from company research and development expenditures to health data on illnesses probably doesn’t come to mind — but maybe it should.

The Atlanta Census Research Data Center (ACRDC) is just one of 13 data centers scattered across the country that is home to data that would be of interest to researchers from most units at Georgia Tech.

“My research depends heavily upon access to data in my areas of interest — innovation, technology transfer and high-tech entrepreneurship,” said Jerry Thursby, professor of strategic management and Ernest Scheller Jr. Chair in the College of Management. “The data available through the data center is massive and very detailed.”

Access to the information is free to researchers with approved projects, thanks to the Institute’s membership in a consortium that includes other area universities, as well as the Federal Reserve Bank of Atlanta and the Centers for Disease Control and Prevention. Without the consortium membership, fees to access the data can be as high as $20,000, said Julie Hotchkiss, executive director of the ACRDC.

“The data you find in the ACRDC is not available anywhere else — you have to physically go to one of the data centers to have access,” Hotchkiss said. “For example, the data allows for

CENSUS, continued on page 3

Mark Your Calendar for Nov. 2 Benefits Fair

To learn more about this year’s benefits options, be sure to stop by the Benefits Fair and speak to one of the onsite vendors and benefits counselors on Nov. 2 from 10 a.m. to 2 p.m. in the Student Center Ballroom. The fair will feature more than 30 vendors including BlueCross BlueShield and EyeMed. There will be door prizes, an onsite open enrollment computer lab, catered lunch and free wellness screenings for blood pressure and total cholesterol. Stamps Health Services will also have flu vaccines for $25 (Buzz or credit/debit cards only).

www.ohr.gatech.edu/openenrollment

NEWS BRIEFS

‘Junk DNA’ Defines Differences Between Humans, Chimps

Tech researchers have determined that the insertion and deletion of large pieces of DNA near genes are highly variable between humans and chimpanzees. For more, go to http://tinyurl.com/4yv6ev8

Tech to Offer Programs for High Schoolers

The Institute has been awarded a contract from the U.S. Defense Advanced Research Projects Agency to provide manufacturing education programs to high school students. http://tinyurl.com/3wjx39n
**Fest Highlights the Future of Media**

**RENEA LEDANTEC**
**INSTITUTE FOR PEOPLE AND TECHNOLOGY**

Whether your area of interest is computing or communication, there is something for everyone at the second-annual FutureMedia Fest, which will be held Nov. 13 to 17 at the Georgia Tech Hotel and Conference Center.

The three-day conference, presented by Tech's Institute for People and Technology, will feature nearly 100 speakers, including:
- Rob Hunter, vice president of Innovation, ESPN;
- Joel Lunenfeld, director of global brand strategy, Twitter;
- Bill Hoffman, executive vice president, Cox Communications;
- Trish Jones, chief emerging technologies officer, Turner Broadcasting System Inc.; and
- Michael Taven, co-creator, Scummvm.

Panel discussions will cover topics including civic engagement through social media, next-generation emergency response, the future of advertising and marketing, gaming, computational journalism and film in Georgia.

In addition to the conference sessions, attendees will have the opportunity to preview Tech's FutureMedia Outlook 2012, which outlines megatrends that could shape the future of media, content and information in the next five years, and view short- and research demos presenting the latest technologies from Tech students and leading practitioners in the media fields.

Discounted faculty, staff and student one-day passes are $125, and a full three-day pass to the fest is $300.

For more information about FutureMedia Fest, visit the following website:

http://futuremediafest.gatech.edu

**Don’t Miss Final France-Atlanta Events**

**COMMUNICATIONS & MARKETING**

Even though the “France-Atlanta 2011—Together Toward Innovation” celebration is nearing its end, there is still time to enjoy one of the remaining events.

The events are being offered through a partnership between Georgia Tech and the Consulate General of France and highlight French and American collaborations in science, economics, culture and humanitarian efforts.

“Both France and Atlanta share a common strong commitment to innovation as an engine for economic growth,” said Pascal Le Deunff, consul general of France in Atlanta. “Last year, ‘France-Atlanta 2010’ brought together almost 3,500 participants and breathed new life into the relationship between France and the southeastern United States.”

According to President G. P. “Bud” Peterson, France-Atlanta provides a unique opportunity for not just students, but anyone interested in exploring France through cultural and humanitarian logistics, business workshops and scientific symposiums.

“Many of the challenges we face today are global in nature, impacting all of humanity—things like energy, sustainability, water utilization and resources, humanitarian logistics and health care,” Peterson said. “There is no end to the possibilities before us when we work together as a solution.”

These remaining events will take place at Georgia Tech and are open to the public:

- **Nuclear Energy:** Security and Waste Management
  Nov. 4, 7:30 a.m. to 1:30 p.m
  Marcus Nanotechnology Building
- **Paris-Atlanta:** The Physical, Social and Cultural Fabric of “Outer City” and Inner Suburb
  Nov. 5, 9 a.m. to 6 p.m
  College of Architecture, Reinhard-Pierce Family Auditorium
- **Art Papers Live! Lecture Series Presents Two Contemporary French Artists**
  Nov. 9, 7 p.m
  Georgia Tech Institute for Leadership and Entrepreneurship

Fourth Floor, College of Management

www.france-atlanta.org

**CONSTRUCTION, continued from page 1**

began. Facilities and Parking and Transportation have worked together to communicate closures and other information to customers parking in affected lots and will continue to do so until the work is completed, said Torise Battle, communications officer in the Department of Parking and Transportation.

The sidewalk work on the south side of the street and the tree planting and improvements to street lighting on the north side should be complete by late December (see the article on page 3 for more information about tree care and planting on campus).

In addition, North Avenue will be repaved from Luckie to Centennial Olympic Park Drive, a HAWK pedestrian traffic signal will be installed in the crosswalk in front of the Alumni/Faculty House and other electrical and traffic signal work will be completed by the end of February.

In addition to the work on North Avenue, Georgia Power is also relocating power lines from overhead to underground on 10th Street between Cherry Street (Tennis Center) and I-75 access road.

The eastbound southern lane of Tenth Street will be closed during construction work hours (9 a.m. to 4 p.m. weekdays and on some nonfootball game Saturdays), so take alternative routes to avoid delays, Lamia said.

The 10th Street work should be complete by early February. For more information about these projects, contact Lamia at frank.lamia@facilities.gatech.edu.

http://futuremediafest.gatech.edu

http://www.futureMediaFest.gatech.edu
Campus News

Tech Turns iPhone into spiPhone

MICHAEL TERRAZAS
COLLEGE OF COMPUTING

It’s a pattern that no doubt repeats itself daily in hundreds of millions of offices around the world: People sit down, turn on their computers, set their mobile phones on their desks and begin to work.

What if a hacker could use that phone to track what the person was typing on the keyboard just inches away? A research team at Georgia Tech has discovered how to do exactly that, using a smartphone accelerometer — the internal device that detects when and how the phone is tilted — to sense keyboard vibrations and decipher complete sentences with up to 80 percent accuracy.

The procedure is not easy, they say, but is definitely possible with the latest generations of smartphones.

“We first tried our experiments with an iPhone 3G, and the results were difficult to read,” said Patrick Traynor, assistant professor in the School of Computer Science. “But then we tried an iPhone 4, which has an added gyroscope to clean up the accelerometer noise, and the results were much better. We believe that most smartphones made in the past two years are sophisticated enough to launch this attack.”

The technique only works reliably on words of three or more letters. For example, take the word “canoe,” which when typed breaks down into four keystroke pairs: “C-A, A-N, N-O and O-E.” Those pairs then translate into the detection system’s code as follows: Leftright, Left-right-far, Right-right-far and Right-left-far, or LLN-LRF-RLF-LLF. This code is then compared to the preloaded dictionary and yields “canoe” as the statistically probable typed word. Working with dictionaries comprising about 58,000 words, the system reached word-recovery rates as high as 80 percent.

Mitigation strategies for this vulnerability are pretty simple and straightforward, Traynor said. Since the study found an effective range of just three inches from a keyboard, phone users can simply leave their phones in their purses or pockets, or just move them further away from the keyboard.

www.cc.gatech.edu

Plan Outlines Tree Care During Construction

AMELIA PAVLICK
COMMUNICATIONS & MARKETING

When it’s time to break ground for a new construction project, a lot of consideration is given to the trees that cover campus.

“Our first priority is to protect existing trees on our construction sites,” said Anne Boykin-Smith, master planner in Capital Planning and Space Management. “But if a tree is unhealthy and should be removed, we want to take care of this during the construction process and plant replacement trees.

Tree protection and planting is just one of the many topics covered in the Georgia Tech Landscape Master Plan (in Section 6), which provides guidance on a variety of landscaping issues ranging from stone mowing to recommended plant lists.

If a tree is healthy, a plan is created to ensure that it isn’t harmed during construction. The plan usually includes information such as where the root protection zone is, an area that is defined as a diameter equal to two times the height of the tree. Within this zone, no trenching, parking, construction, storage of materials or soil stockpiling is allowed.

Sometimes due to construction or poor health, trees must be removed.

“For example, several trees needed to be removed as part of the Peters Parking Deck retaining wall replacement project because the trees were not thriving — due to years of drought conditions — and might have fallen once the old wall was removed,” Boykin-Smith said.

Prior to removing any trees, an assessment by a certified arborist is required. According to the master plan, a minimum of three replacement trees is required for trees that must be removed because of disease or danger. Replacement trees may be planted anywhere on campus (with Georgia Tech approval).

Other recent construction projects that required tree removal and replacement include North Avenue streetscape, where 39 trees will be replanted, and the Clough Commons, Transsit Hub and Tech Green projects, where 124 were replanted.

As for the new trees that have yet to be replanted, this will occur in the weeks to come, since late fall is the ideal planting season, according to Patrick Traynor, assistant professor in the School of Computer Science, and colleagues have programmed smartphones to detect and decipher strokes on nearby keyboards.

http://tinyurl.com/3bnpptm

CENSUS, continued from page 1

following a worker in some states throughout his or her career and for linking across census data sets and government agency data sets.”

Thursby hopes to use the research and development survey data available at the ACRL to examine the impact of recessions on firm research and development.

Gaining access to the center does require some patience, so Hotchkiss would not recommend the ACRL to someone who isn’t prepared to wait several months for approval. And, while the Census does not restrict research content, there are procedures in place to control the format in which research results become public.

Researchers are required to submit a proposal that demonstrates that the research project has a need for restricted data and will benefit the census program.

“To simplify this process, a census employee, Melissa Banzhaf, is on site and she will work closely with researchers to help them develop a proposal that meets all necessary requirements,” Hotchkiss added.

It can take several months to receive approval, depending on which data are required for the project, and the researcher must undergo a background check.

The ACRL is located in the Federal Reserve Bank of America at the corner of 10th and Peachtree Streets. For more information, contact Banzhaf at 404-498-7338.

http://asyps.gsu.edu/acrld

http://www.whistle.gatech.edu

EVENTS

MISCELLANEOUS

November 2

This “Engaging Conversations” session will highlight what two faculty members are doing to motivate their students to interact with course material in meaningful ways. The event will start at noon in room 321, Student Center, Register at http://tinyurl.com/6hd7ase

November 3

The Georgia Tech Catholic Center invites all faculty and staff to attend mass at 11:15 a.m. followed by a light lunch and fellowship at the Catholic Center, 172 Fourth Street. RSVP to jgrasso@catholic.org.

November 7-12

Join the Office of Student Diversity Programs for a celebration of diversity at Georgia Tech. This year’s program will feature insightful workshops, panel discussions throughout the week. http://tinyurl.com/3by7w5l

November 9

The benefits team from the Office of Human Resources will host a pre-retirement seminar to provide information about the Teachers Retirement System to people who will retire in the next two years. The seminar begins at 9 a.m. in the Student Center Theater. www.ohr.gatech.edu

November 14

Faculty are invited to learn more about applying for Fulbright grants at noon in President’s Suite C, Student Success Center. RSVP to Alynn Prather at alynn.prather@oie.gatech.edu by Nov. 9. A boxed lunch will be provided to each person who RSVPs to the event.

Every Thursday

Purchasing local/organic food from a variety of vendors on Tech Walk from 11 a.m. to 2 p.m. http://tinyurl.com/4yv6so3

For a more comprehensive listing of events, visit www.gatech.edu/calendar.

REAL ESTATE/ ROOMMATES

For rent: lovely home “on golden pond” in beautiful Mountain Park, Roswell community. Excellent Mt. Park elementary school, village green and community pool. Architecturally unique features include three bedrooms, two baths, marble floors, easy maintenance and outdoor room for year-round comfort. Lake view. Contact Dr. C. O’Len. www.cxc4cp4l@gmail.com. 404-275-5660.

Walking distance to campus. Authentic N.Y.-style 1BR/1BA loft from 1910 with 10-ft. ceilings, concrete floors, massive columns and open space flooded with light from wall-to-wall windows. 10-ft. ceilings, easy maintenance and outdoor room for year-round comfort. Lake view. Contact Prather at alynn.prather@oie.gatech.edu.

Classifieds continue on page 4

THE WHISTLE • October 31, 2011 • PAGE 3

w w w . w h i s t l e . g a t e c h . e d u
Lee Came to Tech for First Job, Never Left

AMELIA PAVLIK
COMMUNICATIONS & MARKETING

As a graduate student at the University of Chicago, Suzanne Lee enjoyed being at an institution where people and their research were well known.

“I wanted to continue to be in a place where research was appreciated,” said the assistant professor of finance in the College of Management. “When I was about to start my career and interviewed at Georgia Tech, I knew that I would work with the people that I met — who would later become my colleagues.”

And so, Lee came to Georgia Tech for her first job and is still content six years later.

Lee’s research aims to answer questions such as “Why do we sometimes have unusually volatile markets?” and “How does such volatility evolve over time, or can we predict some of them?” Her focus is on creating better data-gathering techniques to answer such questions.

“Sometimes certain information can trigger very big changes in stock values over a short time period, and my most recent research provides a technical tool to help people understand which information leads to the greatest changes,” she added.

Recently, The Whistle had a chance to learn more about Lee and her time at Tech.

What did you want to be when you were a child?
I wanted to be a doctor but wasn’t that good at chemistry, and I didn’t pass the entrance exam to the medical school I wanted to attend (in South Korea, where I grew up, students take the exam to enter medical school right after high school). My second choice was statistics, and I was good at it, which led me down the path I’m on.

What is one thing that most people don’t know about your job?
I don’t use Facebook or Twitter, but I still value what social media can do.

What is your favorite spot on campus and why?
The Starbucks in Tech Square, because it sells my favorite drink — a green tea latte.

If you could have dinner with one person, dead or alive, who would it be and why?
Albert Einstein. I think his personality would be interesting.

What is your favorite place to grab lunch, and what do you order?
The Starbucks in Tech Square, because it sells my favorite drink — a green tea latte.

What piece of technology could you not live without professionally and personally?
My laptop and iPhone.

Which do you prefer: Facebook, Twitter, or a world without all of this social media stuff?
I don’t use Facebook or Twitter, but I still value what social media can do.

Leaders Wanted for Oxford Program

If you are a staff member who enjoys traveling and doesn’t mind supervising a group of Georgia Tech students, consider applying to be a group leader for the 2012 Oxford Study Abroad Program.

“I had heard about the trip from other colleagues across campus who had gone as group leaders,” said Stephanie Knight, interim director of the Office of Student Involvement. “Everyone had the same message, ‘It will be the hardest summer of your life, but also the most incredible.’”

Knight, who went on the trip in summer 2011, acknowledged that as a group leader you have to be prepared to adapt to a variety of situations.

But, she also came away with lasting memories including one of an evening when Knight and her fellow leaders watched the sun set at the Eiffel Tower with a group of students.

“It was a very surreal moment,” she said. “It’s easy to get caught up in all of the logistics of the program, and that evening was a reminder of my motivation to apply for the trip in the first place.”

From May 21 to June 25, leaders will accompany the students in the program to eight continental European cities over the course of 30 days, with their duties ranging from confirming museum reservations to liaising with the dean of students regarding student disciplinary issues.

Once the students arrive in Oxford, the group leaders’ duties will conclude.

Group leaders must have approval from their home departments in order to be paid while away from the Atlanta campus. Also, leaders must be available to attend a minimum of five training sessions and meetings during the spring semester.

The deadline to apply to be a group leader is Nov. 28. For more information, contact Emily Eders, the program coordinator, at oxford@ece.gatech.edu or visit the following website:

www.oxford.gatech.edu

4BR/2.5BA home in Douglasville. $125,000. Easy access to I-20. 35 minutes from Tech. New wood floors, tile, carpet, paint, HVAC and kitchen appliances. Large backyard: one-acre with woods. Close to shopping, Small, quiet neighborhood, good schools. Contact Brett at walkyb21@gmail.com. Pictures at http://tinyurl.com/3l9o8db.

2BR/1BA refurbished furnished apartment in a two-unit house. walking distance to Inman Park MARTA, close to Emory/Tech. Georgia Tech, Hardwood floors throughout. Central heat/AC, front porch, parking space. $2,000/month, includes utilities. Available 1/1. Call 404- 643-2081.

3BR/2.5BA Marietta townhouse, fees to end unit. Tech, Brook, off-75, 15 min. to Tech. Spacious, three sides brick. Appliances, W/D, fireplace, ceiling fans, open floor plan, eat-in kitchen, countless galore, patio and carport. $189,900. Call 404-865-0657.

For sale, lease or lease-purchase. Warm, inviting 3/1/1 brick home in Medlock Park near nature preserve. Easy commute. Large FR addition, deck, two bonus rooms. Curb appeal, hardwoods, gardens $290,900 or $1.350. Visit www. medlockparkhomes.com or call 404-579-3865.

3BR/2BA house for sale. Ten minutes from Tech, near Inman Park in Old Fourth Ward with wood floors and off-street parking. W/D, great location. $209,900. MLS # 42415522 or call 404- 374-0407.

Grant Park apartment for rent. Less than five min. to Tech. Charming, quiet, bright. Ideal for faculty/staff, grad student, couple. 1BR/1BA plus extra loft space. Includes W/D, hardwood, water, sat-ellite TV, Wi-Fi. $900/month. Call James at 404-771-1070.

3BR/2BA peaceful, furnished, 1/2 mi. off-street front cottage with 400 ft. dock along the southern outer banks (Nagshead, NC). N.C. $750/wk., Wi-Fi, central A/C, W/D, hammock, incredible view. NO SMOKING OR PETS. More info at http://tinyurl.com/3l9o8db or email jud.nady@gatech.edu.

MISCELLANEOUS

Stainless microwave, new, $50. Love seat, blues, golds, new condition, with two pillows, $50. Pub table (wrought iron base, solid wood top), two wrought iron chairs with upholstered seats — like new, $85. Two upholstered chairs, solid wood legs. $20. Email robert.sweifl@business. gatech.edu or call 678-938-0404.

Antique chest for sale. 28 in. by 15 in. by 16 in. Email for pictures. $75. Boston Acoustics BA635 3-piece speaker system. Subwoofer and cube speakers for a PC, Mac or audio device with a head- phone jack, $30. Wingman joystick. $5. Email connett.edith@gmail.com.

Men’s bicycle, black, perfect condition. Worth $1,500, will sell for $75. Has internal eight-speed hub and shaft drive (no chain). Email robert.martingano@ amac.gatech.edu.

Free used toner cartridges for Konica Minolta Magicolor laser printer (our print-er died). Some barely used. Some brand name, some aftermarket. Compatible with many models 2400N through 5550DNF. Email morseneder@ece.gatech.edu.

Tutor wanted in physics/math. For high school junior in AP physics, pay on hourly basis. Preferably living in the Sandy Springs/Dunwoody area and/or with car. Email james.whitfield@gatech.edu.

Ad appear and run for three issues in the order in which they are received. Email submissions to editor9@comm.gatech.edu.