COMMUNICATIONS & MARKETING

Tech Expands Online Learning Presence

Georgia Tech has signed an agreement with Coursera to put its web-based courses online and create new opportunities for hands-on learning in the classroom.

“Georgia Tech is committed to using technology and advanced platforms to enrich and expand educational opportunities,” said President G. P. “Bud” Peterson. “Through Georgia Tech’s Office of Professional Education, we already offer courses to more than 25,000 students worldwide. Steps such as this agreement will enable even more students throughout the world to have access to Georgia Tech’s expertise, and help to meet the needs for lifelong learning.”

“It seems clear that higher education is currently experiencing the first ripples of a wave that could drastically alter the method, scope and scale of educational access and delivery,” said Rafael L. Bras, provost and executive vice president of academic affairs. “Georgia Tech has been in the business of offering online courses and education for some time. By joining Coursera we seek to expand our presence in that space, provide increased global access to our excellent educational products, experiment with new methods and ideas in the delivery of education and, most importantly, enhance the learning options and convenience for our own students.”

Tech’s initial courses include Computational Photography, Computational Investing, Energy 101 and Control of Mobile Robots. The Institute plans to add online courses across a range of disciplines to the online Coursera offerings.

“The technological sophistication and expectations of today’s college students demand that we innovatively and strategically reach new audiences,” said Rich DeMill, director of the Center for 21st Century Universities. “By embracing innovators such as Coursera, who are the vanguard for the oncoming technological revolution, universities can not only improve student access to course content, but also fundamentally change core value structures such as student recruitment and retention, degree customization, and overall productivity and efficiency.”

Dean of Professional Education Nelson Baker also noted, “We are empowering learners to learn, and are connecting and expanding our global learning community to meet the evolving needs of students worldwide. By adding courses via Coursera, we are further supporting an individual’s quest for wanting to be more competitive and competent whether that is in their studies at a university, in their place of employment or just to be members of an educated society.”

Other institutions partnering with Coursera are the California Institute of Technology, Duke University, Ecole Polytechnique Federale de Lausanne, Johns Hopkins Bloomberg School of Public Health, Princeton University.}

COMMUNICATIONS & MARKETING

NSF Names Tech Core Innovation Corps Location

The National Science Foundation (NSF) has announced that Georgia Tech will be a founding network “node” for its Innovation Corps (I-Corps) program, which aims to develop scientific and engineering discoveries into useful technologies, products and processes.

With a three-year, $1.5 million grant, Tech will research, analyze and leverage data from the I-Corps program to develop an understanding of how academic institutions can improve support for innovation ecosystems and how the I-Corps network can enable new collaborations in geographic regions to support commercialization opportunities. The Institute will teach the I-Corps curriculum to cohorts of active researchers from academic institutions.

The Institute plans to add online courses across a range of disciplines to the online Coursera offerings.

COURSEERA. continued on page 2

NEWS BRIEFS

Guidebook Aims to Improve Research Partnerships

The “Researcher Guidebook — A Guide for Successful Institutional-Industry Collaborations” is now available online as a resource for active researchers from academia, government labs and industry. Find out more at tinyurl.com/7yvjj4g

Using Hip-Hop to Teach Computer Science

Tech recently hosted a musical summer camp for high schoolers where they learned how to create and remix hip-hop beats using a software program called “Earsketch.” Learn more at tinyurl.com/7faoac3q

COMMUNICATIONS & MARKETING

Beetles to Blame for Tree Removal

A water oak on the south end of Tech Green was removed on July 14 after losing a battle against the Asian ambrosia beetle.

The female Asian ambrosia beetle infests trees in the spring by boring into them and depositing eggs, leaving a deposit of fungus on which her larvae will feed. The hatched larvae then grow into adult females that further cultivate the fungus, causing the tree to wilt and die.

“We are in the process of having tree specialists come and treat the trees in the area of the infested trees so they will be protected,” said Warren Page, director of facilities operations and maintenance. An additional tree at the corner of Hemphill Avenue and Ferst Drive is also infested. These trees are the first experiences Facilities has had with mature trees being infested. New trees will be planted to replace those removed.
Programs Expose Teens to STEM Topics

From LEGO robotics to mobile app development, the summer programs offered by the Center for Education Integrating Science Mathematics and Computing (CEISMC) allow teenagers to delve into topics that aren’t usually covered in their middle and high school classes.

“Our programs have the capacity to show students that their interest in LEGO robotics, for example, has the potential to develop into a college major and even an entrepreneurial venture,” said Andrew Burch, education outreach coordinator for CEISMC. “We’ve found that our students really enjoy being in an environment that fosters advanced learning and allows them to ground their science, technology, engineering, and mathematics (STEM) topics that are often unavailable in a typical classroom.”

The center’s summer programs were established in 1991 to provide K-12 teacher professional development.

“Teachers would attend a three-week workshop with roughly 100 students arriving toward the end of the program so that the teachers could put their new skills and ideas to use in the classroom,” Burch said.

As CEISMC became more established, the focus of what is now called Programs for Enrichment and Accelerated Knowledge in STEM — or PEAKS — shifted to student outreach.

Enrollment is now open for the summer 2012 programs, which run from July 9 through Aug. 10. The programs continue on page 3.
Buzzworthy Achievements

The following Georgia Tech employees or units have been honored in recent months:

- Grigory Blekherman, Prasad RagHAVendra and Frank Stewart received 2012 Sloan Research Fellowships by the Alfred P. Sloan Foundation. Blekherman and Stewart are assistant professors in the College of Sciences, and Raghavendra is an assistant professor in the College of Computing.
- Younan Xia was named Brock Family Chair and Georgia Research Alliance Eminent Scholar in Nanomedicine in the Wallace H. Coulter Department of Biomedical Engineering.
- Reginald Desroches, chair of Civil and Environmental Engineering, was named “Engineer of the Year for Education” by the Georgia Engineering Alliance.
- Shondra Carter, Government and Community Relations coordinator, was selected by Parenting Magazine to represent Georgia at the third annual Mom Congress on Education and Learning Conference in Washington, D.C.
- Julie Sonnenberg-Klein, an education outreach manager at Georgia Tech Savannah, received an honorable mention for the Chancellor’s Excellence Award.
- Jonathan Hart, assistant director of facilities for the Campus Recreation Center, was named “Building Manager of the Year” by the Office of Emergency Preparedness and Environmental Safety.
- Greek Life Advisor Luke Masser was awarded the Jane H. Sutton Advisor of the Year award at the Southeastern Panhelhnic Conference.
- The Georgia General Assembly recognized Marth Hayeslett, a senior research associate at the Georgia Tech Research Institute, and her team with two separate legislative resolutions commending their contributions to science and technology policy in Georgia.
- Shean Phelps has been named medical director for the Translational Research Institute for Biomedical Engineering and Science.
- Douglas Flaming, a professor in the School of History, Technology and Society, and Stavros Garoulidouls, a professor in the School of Mathematics, were named 2012 Fellows by the John Simon Guggenheim Memorial Foundation.
- Roshan Joseph Vengachary, an associate professor in the H. Milton Stewart School of Industrial and Systems Engineering, has been elected a fellow of the American Statistical Association.
- The School of Architecture has appointed Marc Simmons to the Thomas W. Ventulett III Distinguished Chair in Architectural Design.
- Aaron Levine, an assistant professor in the School of Public Policy, has received the National Science Foundation’s Faculty Early Career Development Award.
- John Papapolymerou, a professor in the School of Electrical and Computer Engineering, has been selected to receive the 2012 H.A. Wheeler Prize Paper Award of the IEEE Antennas and Propagation Society.

Shimi, a musical companion developed by the Center for Music Technology, recommends songs, dances to the beat and keeps the music pumping based on listener feedback. The smartphone-enabled, one-foot-tall robot is billed as an interactive “musical buddy.”

“Shimi is designed to change the way that people enjoy and think about their music,” said Professor Gil Weinberg, director of the center and the robot’s creator. He unveiled the robot at a recent Google I/O conference in San Francisco. A band of three Shimi robots strutted their stuff for guests, dancing in sync to music created in the lab and composed according to their movements.

Shimi is essentially a docking station with a “brain” powered by an Android phone. Once docked, the robot gains the sensing and musical generation capabilities of the user’s mobile device. In other words, if there’s an “app for that,” Shimi is ready.

For instance, by using the phone’s camera and face-detecting software, the bot can follow a listener around the room and position its “ears,” or speakers, for optimal sound. Another recognition feature is based on rhythm and tempo. If the user taps or claps a beat, Shimi analyzes it, scans the phone’s musical library and immediately plays the song that best matches the suggestion. Once the music starts, Shimi dances to the rhythm.

“Many people think that robots are limited by their programming instructions,” said Music Technology doctoral candidate Mason Bretan. “Shimi shows us that robots can be creative and interactive.”

Future apps in the works will allow the user to shake their head in disagreement or wave a hand in the air to alert Shimi to skip the next song or increase/decrease the volume. The robot will also have the capability to recommend new music based on the user’s song choices and provide feedback on the music playlist.

Weinberg hopes other developers will be inspired to create more apps to expand Shimi’s creative and interactive capabilities, allowing the machine to leave the lab and head into the real world.

“I believe that our center is ahead of a revolution that will see more robots in homes, bypassing some of the fears some people have about machines doing everyday functions in their lives,” Weinberg said.

Weinberg is in the process of commercializing Shimi through an exclusive licensing agreement with Tech. A new startup company, Tovbot, has been formed and Weinberg hopes to make the robot available to consumers by the 2013 holiday season. Shimi was developed in collaboration with the Media Innovation Lab at IDC Herzliya, led by Professor Guy Hoffmann. Entrepreneur Ian Campbell and robot designer Roberto Aimi were also part of the Shimi team.

This is the third robotic musician created by the Center for Music Technology. Haile is a percussionist that can listen to live players, analyze their music in real-time and improvise with music of its own. Shimon is an interactive marimba player.

“If robots are going to arrive in homes, we think that they will be these kind of machines — small, entertaining and fun,” Weinberg said. “They will enhance your life and pave the way for more sophisticated service robots in our lives.”

www.gctmt.gatech.edu
Jacobson Prepares ESOL Students to Teach at Tech.

It's amazing what these students are able to do, having very little exposure to listening to and speaking English. Just because students can read English doesn’t mean that they can speak it or understand the spoken word easily. That's why the primary focus of my job is to support the oral-aural skills of students who will be teaching ESOL from New York University and an English for speakers of other languages (ESOL) Consultant in the School of Continuing Education and Executive Development. I began to realize that was teaching them a third language — music — in their second language — English — and became more interested in the ESOL component of working with these students than in teaching music.

Jacobson went on to earn her master's in teaching ESOL from New York University and has worked in this area ever since.

“If an international student doesn’t speak or understand English well, a lot of people think that there’s a quick fix when the reality is that a fix rarely occurs in less than three semesters,” she said. “I’m always so impressed and in awe of these students. I mean, imagine being in their shoes — being expected to teach in English upon arrival. It’s amazing what these students are able to accomplish.”

Recently, The Whistle had an opportunity to learn more about Jacobson and her time at Tech.

How did you arrive in your current position?
In the late 1970s, I moved to Atlanta and taught at what is now the Language Institute at Georgia Tech. I left to focus on raising my children and returned in 1985 to help chair the School of Mathematics at the time with an ESOL assessment, which evolved into a permanent position in the school. In my current position, my responsibilities range from assisting students with their English language intelligibility to coordinating the school’s student graduate student orientation to working on the editorial staff of our alumni magazine.

What is something you would like for people to know about your job?
Just because students can read English doesn’t mean that they can speak it or understand the spoken word easily. That’s why the primary focus of my job is to support the oral-aural skills of students who will be teaching ESOL.

What is the best advice you’ve ever received?
I was working in my first teaching job, fresh out of college, and my students were walking all over me. My principal told me “Don’t smile until Christmas vacation or laugh until Easter.” Great advice.

If you could have dinner with one person, dead or alive, who would it be?
It would probably be Molly Ivins, because her writing was always so clever and insightful. But I wouldn’t mind getting to know Madeleine Albright — I’ve heard her speak and would like to learn more about her.

Tell us something about yourself that others might not know.
I grew up on a potato and sheep farm in the San Luis Valley in Colorado and was the oldest of eight children. Oh, and I briefly majored in civil engineering in college — but after six weeks I was ready to change to music!

www.whistle.gatech.edu

GTPD Works to Identify Armed Robbery Suspects

COMMUNICATIONS & MARKETING

The Georgia Tech Police Department (GTPD) has released video and photos of two men in connection with a recent armed robbery in North Avenue Apartments as GTPD and the Atlanta Police Department (APD) continue to investigate the case.

The ongoing investigation has revealed that the two suspects were seen at the BP gas station on North Avenue, along with a female in their GMC Suburban vehicle, shortly before coming onto Georgia Tech’s campus to rob the victim. According to police, the suspects parked their vehicle at the gas station before walking toward campus.

The two men entered North Avenue Apartments East by tailgating behind a resident. Once in the residence hall, they went to the top floor staying close to stairways for quick exit routes.

The suspects entered an apartment suite on the seventh floor and surprised a resident who was sleeping in a room with the door open. The two men drew a gun and stole a laptop, cell phone and wallet. No one was injured.

The first suspect is described as a black male in his late teens to early twenties wearing a white shirt and red basketball shorts and armed with a handgun. The other suspect is described as a black male in his late teens to early twenties with short dreadlocks wearing a black hat, jeans and a black backpack.

Anyone with information related to the crime can call Atlanta Crime Stoppers at 404-577-TIPS. Callers can remain anonymous.

To prevent future crimes, GTPD is constantly implementing new tactics. It recently partnered with APD to provide a police vehicle that is conducting joint patrols of campus, as well as surrounding neighborhoods and commercial districts.

The 2011 Dodge Charger Enforcer II is a high-tech police cruiser that patrols the Georgia Tech campus, Home Park, Atlantic Station and Midtown.

“The car’s distinctive look and high visibility will ensure that students, business owners and residents alike can rest assured that the Atlanta Police Department and Georgia Tech Police Department are true partners in preventing crime,” said Atlanta Police Chief George Turner. “These kinds of partnerships are at the heart of the APD’s mission statement of partnering with our community to reduce crime and improve the quality of life.”

The gray car with distinctive lettering (ref for Atlanta Police and gold for Tech) will be used nightly for proactive, community policing and crime-fighting purposes.

http://police.gatech.edu

CLASSIFIEDS

Looking for two working professional or grad student roommates to share large, fully furnished 2BR/2BA Buckhead condo. Close to Tech campus. $650/mo., includes utilities and cable/internet. Call 404-561-5052.

Rental to share in Avondale Estates. Private BR/BA with full use of house. Basement for storage. Great location. $600 per month. Utilities included. Email kumekaynodes@hotmail.com.

Well-maintained 3/2 ranch with beautiful yard. Large living room, beautiful kitchen, hardwood floors. Firefly painted and ready to move in. One mile from East-West Connector and Powder Springs Road, 5/14,400+ sq ft. $1,140/month plus utilities. Contact Janice Brown at 770-799-0025.


Furnished home available in hip East Atlanta Village. 2BR/study, screened-in porch, air conditioned, walk-in closet to huge backyard. Available Aug. 15 to June 1 (dates flexible). $750/month plus utilities. Contact laura.bier@hts.gatech.edu.

MISCELLANEOUS


Used 90-gallon, reef-ready, saltwater aquarium by Oceanic with left corner overflow box. Tank only, no hood or stand. Dimensions: 32 in. high by 15 in. deep by 48 in. wide. $400. Call 404-385-2175.

2005 Emerson TV with 20.5-in. screen and remote, good working condition, stand included. Email to see pictures. Will bring to campus for the buyer. Make offer at jenifer.lynne@cornell.gatech.edu.

Thomaville bookease twin bed and trunk storage drawers for sale. Great condition. Bed measures 43.5 in. wide by 90 in. long. Bookcase is 12 in. deep. Two large storage drawers underneath measure 37 in. wide by 19 in. long by 6 in. deep. $350. Email msbg74@gmail.com.

Santa Cruz Superlight Mountain Bike. Blue, medium. Rock Shox Sid 100, suspension works great, no leaks. XTR V-Brakes, XT Cranks, XT Cassette. Great shape, some superficial scratches from travel/ wear. $700. Email ecrusell@gmail.com.

Adopt a tame and abandoned GT kitten or cat. All are spayed/neutered with some shots. Free adoption for GT employees, students and friends. Visit www.krazyaboutkats.com or email Marilyn Smith at marilyn.smith@ee.gatech.edu.

Old Town 147 Canoe, like new. Includes Old Town 147 Canoe, like new. Includes two paddles and mount for electric motor. $1,400.


Gifted Peapod cyclorss bicycle, white and blue, 57-cm. frame, Shimano 105 components, excellent condition, $700. Ridden exclusively on-road. Includes clipless pedals, computer and spare stem. Email danwilcocks@gmail.com.

Lenwood Podar cyclocross bicycle, white and blue, 57-cm. frame, Shimano 105 components, excellent condition, $700. Ridden exclusively on-road. Includes clipless pedals, computer and spare stem. Email danwilcocks@gmail.com.

Old Town 147 Canoe, like new. Includes two paddles and mount for electric motor. $1,400.

Ads run for three issues in the order in which they are received. Email submissions to editor@comm.gatech.edu.

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