Researchers Listen to 2011 Japanese Quake

JASON MADEIER
COMMUNICATIONS & MARKETING

Last year’s 9.0-magnitude Tohoku-Oki, Japan, earthquake was the fourth largest since 1900 — and the best-recorded earthquake of all time.

This information is allowing scientists to share their findings in unique ways. Zhigang Peng, associate professor in the School of Earth and Atmospheric Sciences, has converted the earthquake’s seismic waves into audio files.

“They are able to hear pitch and amplitude changes while watching seismic frequency changes,” Peng said. “Audiences can relate the earthquake signals to familiar sounds such as thunder, popcorn popping and fireworks.”

The different sounds can help explain various aspects of the earthquake sequence, including the mainshock and nearby aftershocks. For example, one measurement was taken near the coastline of Japan between Fukushima (the nuclear reactor site) and Tokyo. The initial blast of sound in the recorded clip is the 9.0 mainshock. As the earth’s plates slipped dozens of meters into new positions, aftershocks occurred. They are indicated by “pop” noises immediately following the mainshock.

March 12 is the one-year anniversary of the 9.0 magnitude earthquake that spawned a tsunami and a nuclear crisis.

Curricula Updates will Allow Students Increased Flexibility

AMELIA PAVLIK
COMMUNICATIONS & MARKETING

Providing students with more flexibility regarding which courses they take and when is at the heart of recent faculty-approved changes to Mechanical and Electrical and Computer Engineering curricula.

“To be competitive, today’s engineers require a broad interdisciplinary skill set, which means that our programs have to provide the opportunities for our students to gain these skills,” said Gary May, dean of the College of Engineering. “These changes won’t affect the rigor of the programs, rather they will ensure that the theory we teach is better connected to practice.”

The updates reflect a national trend among collegiate engineering programs to provide curricula that are challenging but also allow students more flexibility when it comes to taking electives or finding time to fit a co-op or study abroad experience into their schedules. However, as far as May knows, Georgia Tech is one of the first universities to follow through with revamping multiple engineering program curricula.

“It’s been a while since these degree programs were updated to reflect current standards, and I’m impressed that the faculty in both schools recognized the need for change and were proactive,” May added.

MECHANICAL ENGINEERING

In February, faculty members in the Woodruff School of Mechanical Engineering voted to revise the current curriculum, which will allow students to choose a “breadth” or “concentration” option. Both options will increase the total curriculum credits from 126 to 129.

Tech Provides Online Resource for Kids’ Summer Camps

COMMUNICATIONS & MARKETING

The task of finding the perfect summer program for your child just got easier.

The Office of Human Resources now provides an online tool that allows Georgia Tech employees to search a comprehensive database of nearly 1,000 summer camps for children in the Atlanta area. Faculty and staff may search for the perfect camp in a variety of ways — by age, camp specialty and location — for elementary through high school students.

Access to the database is available through June 15. In addition to the database, the Campus Recreation Center has compiled a directory of Tech-sponsored summer camps that focus on areas including math, science and sports.

If you have any questions related to the website, contact Kim Love at kimberly.love@ohr.gatech.edu or 404-385-2377.

Both resources can be found at www.ohr.gatech.edu/summercamps
EVENTS

ARTS & CULTURE

March 22-25
The First Center presents Ballerina Dance Company’s Jazzy Sleeping Beauty. Call 404-894-9600 for times and ticket information. www.ferstcenter.gatech.edu

March 26-April 5
A free local film series will be held at the Clay Theater, Student Success Center. For information, visit tinyurl.com/74r2r9f

March 30-April 20
DramaTech presents “Rent” at 8 p.m. in the DramaTech Theater, First Center. For ticket information visit dramatech.org

March 31
The First Center presents ukuleleist Jake Shimabukuro at 8 p.m. Call 404-894-9600 for ticket information. www.ferstcenter.gatech.edu

CONFERENCES AND LECTURES

March 26
The Student Planning Association’s Social Justice Committee will host its annual lecture event, a discussion on the effect of coal on communities, at 6 p.m. in the Reinsch-Pierce Family Auditorium. www.georgiatechspa.com

March 28
The School of Chemical and Biomolecular Engineering welcomes Michael Dixon of North Carolina State University at 4 p.m. in room G011, Molecular Science and Engineering Building. cbhe.gatech.edu

March 29
The Blended Research @ the Library series features a panel discussion about “Human Systems Interaction: Assistive Technology” at 2 p.m. in the Library’s Neely Lobby. www.library.gatech.edu

March 29
The Center for International Strategy, Technology and Policy presents a lecture on “The Next Step in Arms Control: A Nuclear Control Regime” at 3 p.m. in the Gordy Room, Warlday Center. Register for the event at tinyurl.com/feryypp?

April 2
The IMPACT Speaker Series welcomes Blake Canterbury, CEO of berenoly, at 4:30 p.m. at the College of Management. iis.gatech.edu/IMPACT

April 4
The Center for 21st Century Universities will sponsor an Arts and Technology Uncordination from 2:30 to 5 p.m. in room S126, Centergy Building. www.c21s.gatech.edu

Events continue on page 3

COMMUNICATIONS & MARKETING

Donate Items for Earth Day Events

Kick off your spring-cleaning efforts by gathering items to contribute to Georgia Tech’s Earth Day efforts.

Until March 30, members of the campus community may donate used athletic shoes, clothing, E-waste, office supplies or books for one of the following Earth Day projects:

• Reuse-A- Sho e: The Nike Reuse- A- Shoe program grinds up old athletic shoes and turns them into material used to build running tracks, basketball courts and tennis courts. Used athletic shoes (with rubber bottoms) can be dropped off at the Office of Solid Waste Management and Recycling, Barnes & Noble® Georgia Tech Bookstore and Burdell’s.

• Clothing Swap: Gently used clothing and accessories are being collected for the fourth annual Clothing Swap, which will be held during the 2012 Earth Day celebration on Friday, April 20. At the Earth Day Celebration students, faculty and staff may shop through the donated items — free of charge. Drop-off locations include the Office of Solid Waste Management and Recycling (947 Atlantic Dr., 404-367-0088), Barnes & Noble® Georgia Tech Bookstore and Burdell’s.

• E-Waste Drive: Tech has partnered with Atlanta Recycling Solutions to host an electronics recycling drive. E-waste, including laptops and keyboards, can be dropped off during the Earth Day Festivities, or items can be dropped off now through March 30 at the Office of Solid Waste Management and Recycling from 9 a.m. to 4 p.m.

• Office Supply Exchange and Book Swap: Donate your unused supplies for the Office Supply Exchange. At Earth Day, members of the campus community can shop through the donated items — free of charge. This year, a book swap is also being incorporated. Drop off supplies and books at the Office of Solid Waste Management and Recycling.

www.earthday.gatech.edu

www.ferstcenter.gatech.edu

COMMUNITY & EVENTS

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Events continue on page 3

Written by: Kristen Shaw

Communications & Marketing

Friendships Forged through Second Languages

Every couple of weeks in the courtyard outside the O’Keefe Building behind the women’s softball complex, people of all ages take part in a language development exercise reminiscent of the biblical Tower of Babel.

“If you come over here during a session, you wouldn’t think you’re in Georgia,” said Adria Motiwalla, student services coordinator at the Georgia Tech Language Institute. Those participating in these multilingual conversations are part of the Language Institute’s Friends Beyond Borders Language Cafe. This conversation program offers an opportunity for students, faculty and staff from around the globe to socialize and brush up on second language skills.

Part of Tech’s strategic plan is to produce global citizens; the Language Institute offers a place to begin that global journey without even leaving campus.

The Language Institute hosts recent high school graduates, college students and professionals from abroad who come to the United States either on short-term scholarships or to spend time learning English before applying to an undergraduate or graduate program stateside.

“I think there’s a lot of credibility with the name Georgia Tech, so students want that on their transcript,” Motiwalla said. “We have students transferring in from all over the planet saying they’re not getting quality English elsewhere.

College students and business types also use the center to hone English skills for a professional environment. The largest cohorts speak Arabic, Korean and Spanish, but other languages heard at the Institute include French, Portuguese, Chinese, Thai and Japanese.

What the Language Institute needs more of is English speakers.

“We’d love to have staff who travel for Tech and maybe want to brush up on a language,” Motiwalla said. The program welcomes all students, faculty and staff who want to improve and practice a second language.

For those looking for a more in-depth conversational experience, the Language Institute also offers a conversation partner program that matches speakers through an online system.

“It’s a tool to meet somebody on campus and develop a friendship, with the goal of hopefully meeting a speaker with whom you can do a language exchange,” Motiwalla said. Those interested in attending Friends Beyond Borders events may sign up online at esl.gatech.edu. Attendance is open to anyone with a GTID.

The next Friends Beyond Borders Language Cafe meets on Friday, March 30, at 1 p.m., with subsequent events on April 13 and April 27. The Language Cafe will also participate in the upcoming 2012 Culture Fest on April 2.

esl.gatech.edu

Tom Smeltzer, photojournalist
Re-Hand Wins 2012 InVenture Prize

MATT NAGEL
COMMUNICATIONS & MARKETING

Re-Hand, a software-assisted, home-use hand assessment and rehabilitation device, has won the 2012 InVenture Prize.

“It was amazing,” said Re-Hand team member Daphne Vincent, who graduated in December of 2011 with a degree in biomedical engineering. “We are so excited. We now have our first investment, and we will be able to get our invention into the hands of the people who really need it.”

As the winner, Re-Hand received a cash prize of $15,000, a free U.S. patent filing by Georgia Tech’s Office of Technology Licensing and automatic acceptance to the 2012 class of Flashpoint, a Tech start-up accelerator program.

Vincent’s team included three other biomedical engineering majors: Alkindi Kibria, Elizabeth LaMar and Kunal MacDonald.

“The competition was nerve-racking, exhilarating and thrilling,” Vincent said. “We worked really hard over the last year, especially over the past two months. We have had so many crazy times and late nights, but it finally paid off.”

Matthew Stodard, an industrial design major, and Christopher Vollo, an electrical engineering major, finished in second place with their invention. Stylii is an extraordinarily precise and pressure-sensitive capacitive stylus designed for use on the iPad.

Second place also receives a free U.S. patent filing by Tech and automatic acceptance into Flashpoint, along with a $10,000 cash prize. “The patent will help us out so much, and we’re excited about anything that will help us get this to market,” Stodard said. “With the right connections and the right progress, it (the Stylii) will be on the market by Christmas.”

CardiTech, a chest retractor for bypass surgery, won the People’s Choice Award, which comes with a $5,000 cash prize.

Mechanical engineering students Benji Hoover and Josh DeVane and biomedical engineering students Kevin Parsons, Matthew Lee and Priya Patil made up the CardiTech team. “Overall, we’re pretty happy with the People’s Choice Award,” Hoover said. “We would have loved to get a patent, but we are going to continue to work on getting our FDA clearance so we can get this thing into surgery.”

inventurenprize.gatech.edu

News Blog Showcases Georgia Tech’s Expertise

COMMUNICATIONS & MARKETING

According to the strategic plan, Georgia Tech will influence technological, social and policy decisions that address critical global challenges.

This expertise will now be showcased in the Amplifier, a multi-contributor news blog pairing current issues with commentary from Tech experts. It will provide a forum to spotlight, “What does Georgia Tech think?” The primary goals of this initiative are to:

• Better position Tech as a research/thought leader.
• Provide a unique forum to position Institute expertise in social media spheres.
• Allow all audiences to participate in a dialogue associated with Institute research.
• Help media more easily connect experts with timely news stories.
• Create a flow of high-value, time-critical content. A companion Twitter feed strategically targeting journalists has also been created to highlight new posts and other Georgia Tech news.

View the blog at the following link: www.amplifier.gatech.edu
Volunteer for March 31 Tech Beautification Day

COMMUNICATIONS & MARKETING

If you’re looking for a way to give back to Georgia Tech while getting to know students, consider rolling up your sleeves and volunteering for Tech Beautification Day on March 31 from 10 a.m. to 1:30 p.m.

The event started in 1998 as a day of service where students could give back to Tech through a combination of on-campus clean up and landscaping tasks. Over the years, participation has grown to more than 1,000 volunteers.

“This year, we would like to invite faculty and staff to join in,” said Elizabeth Poole, a second-year business administration student and director of alumni and faculty relations for the event. “If you’re looking for a way to get to know students in a less formal environment, this is a great way to make that happen.”

Students Create Beltline Structure

COMMUNICATIONS & MARKETING

Image courtesy of the College of Architecture

This weekend, take a moment to venture out to the portion of the Atlanta Beltline that runs behind Ansley Mall to see a structure that was designed by Georgia Tech students from the College of Architecture. The design, a woven wooden vault structure, was constructed in the college’s Digital Fabrication Lab with help from Assistant Professor Tristan Al-Haddad. It will be up until mid-April.

Where is your favorite spot on campus? I enjoy the walk from Tech Square to the Student Center — and the Dunkin’ Donuts coffee that I always stop and get on the walk.

What is the one piece of technology that you can’t live without? Three months ago, I would have said that I hate technology. But then I got an iPhone, and I love it! I don’t know what I did before I had access to all of these great apps.

Which do you prefer and why: Facebook, Twitter or a world without either? A world without any of it. It always seems like a lot of work to maintain these accounts, kind of like a job. And I don’t want another job to do in my spare time.

What is the greatest risk you’ve ever taken, and did it pay off? Several years ago, I quit a job right before Christmas — and I didn’t have a back-up plan. I realized that the situation wasn’t right for me, and I was so comfortable with the decision that I wasn’t worried about what came next (even though I’m a chronic planner). Thankfully, I found another job quickly, so I say the risk paid off.

If you could have dinner with anyone — dead or alive — who would it be? My grandpa, Sam. He passed away about 30 years ago, and I miss him.

Where is your favorite spot on campus? I enjoy the walk from Tech Square to the Student Center — and the Dunkin’ Donuts coffee that I always stop and get on the walk.

For more information, contact Poole at spoole7@gatech.edu.