Recent Grad Aims to Improve iPad Experience

KRISTEN SHAW
COMMUNICATIONS & MARKETING

When Daniel Hooper became frustrated with editing text on his iPad, he wrote an application that could revolutionize the way users select and arrange their words on tablets.

“I see the iPad as the future of computing, and I think a couple years down the road it will be the only thing most people own,” said Hooper, who earned a bachelor’s degree in computational media from Georgia Tech in May. “Because of that, I feel a lot of things need to get better — particularly editing text.”

The Hooper Selection uses the keyboard to select, copy and paste text, rather than having the user highlight on the text itself. Hooper demonstrates the method in a YouTube video (visit tinyurl.com/cxpy3lx) that has garnered more than 600,000 views and drawn attention from media outlets such as Business Insider, Gizmodo and Engadget. As for the name, Hooper himself can’t take credit. “Another developer emailed me saying he had made a Wikipedia page,” Hooper said. “He was concerned so many people were copying the work that I wouldn’t be remembered as the creator. The name is kind of dorky and still sounds weird to me, but it works.”

Hooper, who himself is an iPad and iPhone owner, has been working on iOS development since his freshman year at Tech. Last fall, he created a game called Percepto, and Hooper Selection emerged as a project for his digital humanities course last spring.

“It’s sort of a bland thing, text editing, but it’s so key to everything you do. Regardless of the app, you’re probably typing at some point.”

Whether Apple implements the idea or not, Hooper hopes it inspires all companies to put more time and research into this aspect of the tablet user experience. He’s already seen some third-party developers use it in their applications.

“I put the video out there hoping people would think it was cool and, at the very least, make them unhappy with the current state even if this isn’t the solution.”

The Hooper Selection uses the iPad keyboard to select, copy and paste text, rather than having the user highlight on the text itself.

Vice Provost Vito to Retire

COMMUNICATIONS & MARKETING

Following 37 years of service to Georgia Tech as a professor, researcher, administrator and advocate, Raymond Vito has announced his intention to retire at the end of May.

For the past five years, Vito has served as Tech’s vice provost for Graduate and Undergraduate Studies, overseeing academic activities such as curriculum development and educational technology, as well as experiential learning initiatives such as the Honors Program, cooperative education and the InVenture Prize.

“The most rewarding aspect of my career has been anything that impacts student success,” he said. “It’s amazing how clear your thinking on an issue becomes when you ask, ‘what would be best for the students?’

Following his official retirement, Vito will return on a part-time basis later this year as an emeritus faculty member and special assistant in support of institutional initiatives for both the Office of the Provost and Office of the Executive Vice President for Research.

“Ray has been one of the driving forces in creating the kinds of student experiences that highlight Tech’s commitment to entrepreneurship and creativity,” said Provost and Executive Vice President for Academic Affairs Rafael L. Bras.

For the past five years, Vito has served as Tech’s vice provost for Graduate and Undergraduate Studies.

The Alumni Magazine Website Gets a New Look

The Alumni Magazine and its website have been redesigned. Take a look at the new site at http://gtalumnimag.com

Tech Gets $5 Million for Hispanic, Latino Outreach

COMMUNICATIONS & MARKETING

The Goizueta Foundation has awarded Georgia Tech a $5 million grant to promote Science, Technology, Engineering and Math (STEM) fields to Hispanic/Latino K-12 students.

“The Goizueta Foundation has awarded Georgia Tech a $5 million grant to promote Science, Technology, Engineering and Math (STEM) fields to Hispanic/Latino K-12 students.”

President G. P. “Bud” Peterson. “Hundreds of Georgia Tech Hispanic and Latino students have benefitted from support provided by The Goizueta Foundation over the last decade. We’re looking forward to partnering with the foundation to expand opportunities for K-12 Hispanic and Latino students through new programs, and enhancing those where Tech has national leadership.”

The five-year grant will support and enhance the GoSTEM research-based model and will demonstrate how technological universities and school systems can partner to promote academic achievement.

Specifically, the grant will support the following programs:

• Graduate Teaching Fellows Program
• Pathways to College Program, after-school programming

GOIZUETA, continued on page 4
Professional Ed Dean to Lead GT-Savannah

NIKEI TROXCLAIR  PROFESSIONAL EDUCATION

The Georgia Tech-Savannah campus is transitioning into a hub for professional education, as recommended by the Institute’s task force report last summer. Professional Education Dean Nelson Baker will lead the new direction of the Savannah campus.

Baker is a nationally recognized leader in award-winning educational technologies designed for and applied to engineering and technical training.

As the dean of Professional Education, Baker is responsible for the oversight of all professional education programs at Georgia Tech and for the distance-delivered master’s degree programs.

“Nelson will provide the leadership and direction needed to guide Georgia Tech-Savannah through this transformation,” said Provost Rafael L. Bras. “He has a strong vision for professional education at Georgia Tech, and Savannah can play a key role through its new mission focused on meeting the needs of the community and industry in the coastal Georgia area.”

GT-Savannah will begin to offer professional education classes this fall in the areas of OSHA, LEAN Healthcare, supply chain logistics and project management, with additional programs to be scheduled in the future.

The Savannah campus will also continue to deepen engagement with the community via partnerships with industry, other educational institutions, K-12 outreach and the military.

“I’m excited that Georgia Tech is investing in the Savannah campus through our professional education program,” Baker said. “Over the last year, I have learned that the Savannah business community is very dedicated to working with GT-Savannah. Our goal is to create new programs that will have a vital and lasting impact in Savannah and the coastal region.”

Within the educational technology domain, Baker has helped create and assess technology used by students in the pursuit of evaluating the impacts on knowledge retention and transfer.

These activities have included multilingual Web-based intelligent simulations for problem solving, intelligent tutors, student models, virtual reality interfaces for education and medical assistants for physicians.

Baker’s research interests include intelligent learning environments for engineering, applications of artificial intelligence and other computer-based techniques to solve engineering problems, as well as robotic applications in civil engineering.

He holds a master’s and PhD in civil engineering from Carnegie Mellon and a bachelor’s degree from Georgia Tech.

www.savannah.gatech.edu

Library Appoints Associate Deans

TEARANNY STREET  LIBRARY AND INFORMATION CENTER

Both Bruce Henson and Jeff Carrico have served as interim associate deans in the Georgia Tech Library since 2011 and have been officially appointed to these positions. In addition, a new director of business operations, Vanessa Payne, was hired and will assume her position on June 1.

“Henson and Carrico have been performing extremely well in these roles for more than a year and it was past time to recognize their contribution to the Library and the Institute,” said Catherine Murray-Rust, vice provost for learning excellence and dean of libraries.

As associate dean for research and learning services, Henson is responsible for reference and information services, the Library and Clough Commons service desks, faculty engagement, the multimedia center, Archives and the Architecture Library.

Carrico now serves as associate dean for scholarly communication and access where he oversees collection development, information delivery, information technology, collection development, acquisitions, cataloging, scholarly communication and digital curation services.

Payne will oversee business/finance, facilities, human resources, security, and shipping and receiving.

www.library.gatech.edu

Materials Science, Engineering Appoints New School Chair

COLLEGE OF ENGINEERING

Naresh Thadhani has been appointed chair of Georgia Tech’s School of Materials Science and Engineering (MSE), effective Aug. 1.

“Naresh brings with him a great set of teaching, research and outreach skills to the position of school chair. He will provide excellent vision and leadership to ensure the success of the faculty, staff and students,” said Gary S. May, dean of the College of Engineering. “Naresh will use his exceptional knowledge and experience to continue to advance the provost and build on its successes.”

Thadhani, who is currently a professor and associate chair of the school, said he is honored to have the opportunity to serve as chair of MSE.

“I look forward to partnering with the outstanding faculty, staff, students and alumni in taking MSE to the next level of excellence and recognition,” he said.

Thadhani’s research focuses on studies of shock-induced physical, chemical and mechanical changes for the processing of novel materials and for proving the deformation and fracture response of metals, ceramics, polymers and composites subjected to high-rate impact loading conditions.

He has been recognized as a Fellow of ASM International based on his contributions in materials effects of shock compression.

He earned his PhD in metallurgical engineering from the New Mexico Institute of Mining and Technology. He joined the faculty of MSE in September 1992.

www.mse.gatech.edu

ARTS & CULTURE

Through June 1

The Innocents’ Room is an exhibit that features original images and video and benefits Operation Photo Rescue. It is open to the public daily from 9 a.m. to 5 p.m. at the Robert C. Williams Paper Museum.

http://ipst.gatech.edu

June 6

The Pickle on 5th film series will feature “Mission: Impossible 4” at 7 p.m. at Fifth Street, Tech Square. It’s free to attend and free popcorn will be provided.

CONFERENCES AND LECTURES

June 1

The second annual Pediatric Surgery and Technology Research Day will be held from 7:30 a.m. to 1 p.m. at the Emory University School of Medicine.

The seminar will showcase ongoing pediatric research projects from the Atlanta community.

www.trains.gatech.edu

June 5

An interactive workshop on “From Transit Hubs to Combat Zones: Serving the Government Customer with Lightweight Materials” will be held from 7:30 a.m. to 4 p.m. at the Global Learning Center.

www.trains.gatech.edu/events/dpac

June 7

The Georgia Tech Business Network will host a panel on “Talking Traffic: A Public Forum on the July Transportation Referendum” at 6:30 p.m. at LeCraw Auditorium, College of Computing.

www.library.gatech.edu

TRAINING

May 31

A course open to Georgia Tech employees on “Effective Problem Solving in a Customer Care Environment” will be offered from 8:30 a.m. to 3:30 p.m. in room 308, Savant Environment.

Through June 1

AED/First Aid Training will be offered a course open to employees on CPR/First Aid. For more information, call 404-894-7214. Please be at least 10 days prior to desired publication date. Classified submissions are on a first-come, first-served basis. For more information, call 404-894-4142.

Events continue on page 3
Faculty Use Video Projects to Engage Students

When it comes to gauging a student’s understanding of what’s going on in class, a video can be much more revealing than the average homework assignment.

“Students tend to stretch the limits of the collaborative nature of your average homework assignment and often arrive at the correct answer without understanding the material,” said Ed Greco, an instructor who coordinates half of the introductory courses in the School of Physics. “But when the assignment requires them to problem solve in a short video, it becomes very difficult to hide the gaps in their understanding.”

Greco began using the videos as a learning tool after attending a workshop sponsored by the Center for the Enhancement of Teaching and Learning. At the workshop, Greco met Jarrad Reddick, academic support manager for OMED: Educational Services, who was already using video as a way to urge calculus students to demonstrate their knowledge.

“I became interested in championing video use in class because my master’s thesis focused on the integration of multimedia technologies into science, technology, engineering and math courses at Georgia Tech,” Reddick said. “In addition to providing Ed with support, I’m currently working with faculty from the schools of Mathematics and Biology to help them integrate video use into classes. And I’ve partnered with the Center for 21st Century Universities to work on other ways to employ video use in the classroom.”

This academic year, Greco gave students the option to submit a short video response to a physics-based problem for extra credit. Last semester, for example, he provided a virus video of people swinging on the world’s largest rope swing (visit tinyurl.com/778cdlf). Approximately 20 percent of his students participated and created five-minute videos that explained the physics of the swing. Students were asked to respond to questions including, “Where along the trajectory is the tension of the stretch rope the greatest?”

Greco encouraged students to use whatever video camera was available, whether it was a camcorder or a cell phone. “The Library offers a variety of digital camcorders if students are in need of one: visit www.library.gatech.edu/.

Reddick was available to help Greco’s students with the projects and encourages any student who has a question about creating a video to contact OMED for assistance.

“It’s important to emphasize to students that the videos will be judged on the quality of the physics, not the production quality of the video,” Greco said. “This prevents students from inflating their rankings with comedy or satire. Greco didn’t provide a specific rubric or solutions, just questions for students to keep in mind as they viewed each video. The problem itself was open in nature, so there was no correct answer, he added. Each time Greco offers these assignments, he is able to improve the process.

“For example, last semester when I first tried this, I didn’t realize that most students will wait until the last second to submit their assignment, and this was problematic when it came time for students to upload their videos to T-Square,” Greco said. “T-Square couldn’t handle hundreds of students uploading and converting large videos all at the same time.”

To remedy this problem, the semester students were allowed to upload their videos anywhere on the web (e.g., to YouTube or Vimeo). The only requirement was that they had to provide a URL where the video could be accessed.

Another change that Greco will make next semester is to require the videos rather than make them extra credit.

“Students have been receptive to the videos being mandatory, with the understanding that I would need to dial back some other tasks related to the class, given creating the videos takes more time and effort,” Greco said. “And I’m willing to do this, because the videos are much more useful to me when it comes to ensuring that students are learning the material.”

For more information, contact Greco at ed.greco@gatech.edu or Reddick at jreddick@omed.gatech.edu.
What started as an effort to keep a stray cat from being euthanized turned into a way of life for Michael Leasure.

“My wife and I have rescued more than 25 dogs and cats over the years,” said Leasure, associate director of energy conservation for Facilities. “Our strategy is to rescue animals that fall in our path, meaning that we don’t seek them out. It all started in 2001 when Leasure and his future wife found two wild kittens and their mother. The couple took the cats to the Humane Society only to learn that the mother would likely be euthanized — and Leasure wasn’t willing to accept that answer.

“I told my wife Renee that I was going to tame that wild cat,” he said. “We had some tough times initially, but now the cat, Mona Lisa, loves me to death.” Although the cost to rescue an animal can be anywhere between $250-600, Leasure takes it in stride.

The couple does not charge a fee for people to adopt the animals. Before they will give the animal to a new owner, the two require the prospective owner to visit their home (with any pets), and they will visit the person’s home.

“And we have said ‘no’ to people,” Leasure said, which is part of the reason why he and his wife have six permanent pets — all of which were originally rescue animals.

Recently, The Whistle had an opportunity to learn more about Leasure and his time at Georgia Tech.

What did you want to be when you were a child?

I remember the moment in high school when I realized that I wanted to be an engineer. I was sitting in a McDonald’s parking lot, where I was working at the time, and my buddy asked me what I wanted to do with my life. He said he was going to be an engineer like his father, and I had an a-ha moment. I always enjoyed taking things apart and putting them back together, so being an engineer sounded like a good fit for me, too.

How did you get to Tech?

I worked for Pillsbury in Tennessee for many years doing project engineering. But I wasn’t feeling challenged anymore. So I moved to Atlanta to be closer to my sister and took another job for a company that I later learned was going under. I soon found myself interviewing for a job at Tech as an infrastructure manager in Facilities. And 14 years and two promotions later, here I am.

What is something that you’d like for people to know about your job?

These days, most of my time is spent overseeing a staff that includes 15 engineers. My job is to keep everyone on track and to coach people on how to solve problems related to keeping energy costs down. I wish people realized that although there are things to do with energy conservation in the buildings on campus, we’ve come a long way. For example, 20 years ago the administration started updating the central chiller plant (the source of most air conditioning on campus). We’ve been working on this behind the scenes for a long time and have made some great progress.

What is most satisfying about your work?

I still get to create and fix things. For example, the College of Computing had a lecture hall that flooded every time it rained. For more than 10 years, many people tried to fix it — but my team finally did.

Where is your favorite place on campus?

There’s a bench in front of the First Center that is next to a statue of former dean George C. Griffin. I really like this spot because it’s shady and usually cool.

What is the best piece of advice you’ve ever heard?

President Reagan used to have something on his desk that said, “There’s no limit to what you can do if you don’t care who gets the credit.”

Tell us something about yourself that others might not know.

I had such severe dyslexia that by the fourth grade I still could not read. Thankfully, my parents recognized the problem and got me help. Now, I will soon graduate with a Master of Science in Systems Engineering from Southern Polytechnic State University.