iPhone App May Help Monitor Parkinson’s

Researchers at the Georgia Tech Research Institute (GTRI) have developed a novel iPhone application that may enable persons with Parkinson’s disease and certain other neurological conditions to use the devices to collect data on hand and arm tremors and relay the results to medical personnel.

The researchers believe the application could replace subjective tests now used to assess the severity of tremors, while potentially allowing more frequent patient monitoring without costly medical visits.

The program — known as iTrem — could be offered later this year by the App Store, an Apple Inc. website that sells iPhone applications. But iTrem will first undergo a clinical study at Emory University and must receive any required approvals from the Food and Drug Administration.

“We expect iTrem to be a very useful tool for patients and their caregivers,” said Brian Parise, a research scientist who is principal investigator for the project along with Robert Delano, another GTRI research scientist. “And as a downloadable application, it also promises to be convenient and cost-effective.”

Delano explained that the development of iTrem was linked to his own diagnosis of Parkinson’s disease several years ago. He eventually became frustrated with the subjective approaches commonplace in the characterizing of patient tremor symptoms.

“Currently, doctors observe tremor during office visits and rate it on a subjective scale of zero to four. That approach seemed outdated to me, considering all the technology now available,” Delano said. “My wife, Heather, who’s an engineer, remarked that maybe we could try putting some accelerometers on my arm. That made me think of the accelerometer in the iPhone — and here we are.”

iTrem utilizes the iPhone’s built-in accelerometer to collect data on a patient in his or her home or office. The application directly tracks tremor information currently, and in the future will use simple puzzle games to record tremor data, which will then be processed and transmitted.

The researchers expect the clinical trial to show that data gathered by the program would allow physicians to remotely monitor the degree of disability, progression and medication response among patients with tremor-related conditions. In addition, iTrem offers a social component that allows people with Parkinson’s disease to communicate with one another.

GTRI research scientists Robert Delano (left) and Brian Parise developed iTrem as a tool that could potentially benefit people with Parkinson’s disease.

Call for Nominations: Social Courage Prize

Nominations for the 2012 Ivan Allen Jr. Prize for Social Courage will be accepted until July 20. For more information, go to http://tinyurl.com/scrge

Campus Community Gather for Diversity Roundtable

The 2011 Diversity Roundtable, held last Friday, recognizes the achievements, contributions and significant impact of African American staff trailblazers. The annual event provides a forum for members of the campus community to engage in meaningful discussions about diversity at Tech.
Institute

PT Services Available to Campus Community

AMELIA PAVLIK
COMMUNICATIONS & MARKETING

Recovering from an injury is always a hassle, especially when it comes to taking time out of your day to go to physical therapy.

But thanks to Georgia Tech Sports Medicine and Rehabilitation, employees never even have to leave campus to get treatment.

"Let's face it, we're easy to get to, and people really like that," said Charlie Ridgeway, clinic director. "Also, a lot of people figure that if we're good enough to take care of both professional and Tech athletes, we're good enough to take care of them."

When it comes to employees, some of the most common injuries Ridgeway treats are shoulder joint issues, ACL tears, ankle sprains and overuse injuries to the neck and back that can stem from sitting at a computer all day.

So, if you sprained your ankle and can't walk on it, how would you access Ridgeway's services?

First off, you would go to a doctor. Then, you would write you a referral or prescription for physical therapy. Then, you would call the clinic to make an appointment. (Anyone — regardless of whether they are affiliated with Tech — can use the clinic.) The clinic would contact your insurance company to verify your physical therapy benefits.

"At your first appointment, we would do an initial evaluation of the injury and set up a plan of care," he said. "During this appointment, we would also provide your initial treatment as well as a plan for daily home exercises."

After that, you would schedule subsequent visits based on your plan for care. Treatments include stretching and massage, exercises using various machines and free weights, computerized and isokinetic muscle performance testing, and hydrotherapies such as an underwater treadmill and hot/cold whirlpools.

Ridgeway added. "We would also provide your initial treatment as well as a plan for daily home exercises."

"I think that a positive mindset is key to a patient's recovery," he said. "I'm a big believer in giving the patient an easier goal to accomplish first and then taking baby steps from there."

To make an appointment, call the clinic at 385-4115.

Employees Encouraged to Read with Freshmen

KRISTEN SHAW
COMMUNICATIONS & MARKETING

The Center for Academic Success (formerly the Office of Success Programs) and the Library and Information Center coordinate the Freshman Reading Project to engage all incoming freshman students in a common reading experience at the start of their college careers. But, faculty and staff are also encouraged to read along with the new students.

"If faculty, staff or other students read this book with the incoming class, they would definitely be more adept at relating to our situations," said Shinjini Das, a second-year industrial and systems engineering major who participated in last year’s reading of Warren St. John’s “Outcasts United.”

This year, Martin Luther King Jr.’s “I Have a Dream: Writings and Speeches That Changed the World” was chosen in conjunction with the celebration of the 50th anniversary of the matriculation of black students at Tech.

"I Have a Dream" will be available at a 20 percent discount to the campus community at the Tech Barnes & Noble Bookstore.

Some GT 1000 and Literature, Communication and Culture classes will use the book in classes during the fall, with academic analysis punctuated by relevant social events throughout the semester. The entire campus community is invited to join in these various events; details will be updated throughout the fall.

www.success.gatech.edu
Outgoing Dean Earns Emeritus Status

COMMUNICATIONS & MARKETING

Commemorating a career of scholarship and service to Georgia Tech, President G. P. “Bud” Peterson has awarded Don Giddens, who has led the nation’s largest College of Engineering for the past decade, the title of “dean emeritus.”

Peterson approved the recommendation earlier this month, submitted on behalf of the College’s nine school chairs and four associate deans. Achievements cited under Giddens’ leadership, which formally ended June 30, include the College’s international reputation for excellence in engineering, the preeminence of its faculty and the growth of its sponsored research funding. During his tenure, the College has awarded engineering degrees to nearly 25,000 graduates at the bachelor’s, master’s and doctoral levels.

“Don’s energy, enthusiasm and dedication to engineering is felt by those of us who have had the pleasure of working with him,” Peterson said. “The credit for our reputation for engineering excellence resides in the quality of our faculty, and with this honor we recognize Don’s leadership and stewardship, under which the College has flourished.”

An alumnus of Georgia Tech three times over, Giddens has been a member of the faculty for more than 40 years. He is the past president of the American Institute of Medical and Biological Engineers; this year, he will serve as president of the American Society for Engineering Education.

Giddens, who has served as dean since 2002, announced last fall his intention to step down at the conclusion of the academic year. In addition to his professional activities, he plans to continue to work on his research in cardiovascular fluid mechanics on a part-time basis.

www.coe.gatech.edu

Web-based Effort Certification for Sponsored Projects Launches

COMMUNICATIONS & MARKETING

If your work involves a grant, contract or other agreement with a federal agency, listen up — life is about to get a bit easier.

On July 8, the Office of Grants and Contracts Accounting launched a new web-based application for all faculty, staff and students who are required to annually certify their salary distribution on sponsored and related support projects.

“The Electronic Annual Statement of Reasonableness (eASR) will improve overall compliance by providing a means of capturing electronic signatures, documenting and collecting reports, while allowing for the electronic storage of auditable documents,” said Amir Rahnamay-Azar, senior vice president for administration and finance.

The eASR will be available for fiscal year 2011 certifications, which must be submitted by August 31.

Faculty and staff members who should complete the eASR will receive an email from Grants and Contracts Accounting that will include a link to the statement. Questions regarding the new system can be sent to easr.ask@business.gatech.edu.

www.grants.gatech.edu

Classifieds

AUTOMOBILES/MOTORCYCLES


2002 Honda Accord. $2,999. Silver, 230,000 miles, new timing belt. Email tonya.stoneman@gmail.com.

2008 Honda Element EX, $17,999. Gunmetal, 83,000 miles, sunroof, tow package and extras. Email tonya.stoneman@gmail.com.

REAL ESTATE/ROOMMATES

Apartment w/ large master BR, free Internet, walk-in closets, private bath and hardwoods. Kitchen w/ new appliances, island, Patio/dock, parking, gated. Washer/dryer, $675/mo. West Midtown, 713-560-7460.


3BR/2BA townhouse in Union City for lease. Near I-85 South and close to Hartfield/Jackson Airport. Bi-level, 2-stay, 3 bath negotiable. All electric appliances included. Large gourmet kitchen and hardwood floors in dining room, two-car parking in rear. Available immediately. Contact Celeste at 676-510-9410.

Furnished studio (775 sq. ft.) with partition for bedroom, fully equipped kitchen, W/D, large balcony, rent $990, utilities included. Near 1-75/40, public transport. Contact Shiva at 404-323-4462 or kintali@gmail.com.

Article Ideas?

If you have an article idea for an upcoming Whistle, we want to hear it. Email us at editor@comm.gatech.edu.

www.8whistle.gatech.edu
A Memento from the 1996 Olympics

In honor of Tech’s 125th birthday year, we’re partnering with Georgia Tech Alumni Magazine to highlight a piece of Tech history. This issue’s topic: a prototype of the 1996 Summer Olympic Games torch.

The following excerpt is number 67 on the list “125 Pieces of History,” featured in the September/October 2010 issue of Georgia Tech Alumni Magazine:

Among the Institute’s mementos from the 1996 Summer Olympic Games in Atlanta is a prototype of the torch. Components of the torch were developed by a six-member team at Tech led by then-mechanical engineering professor Sam Shelton, also a Tech alumnus. Equipped with a dual-burner system, the 3.5-pound lighted torch could withstand rain and wind up to about 30 mph and held enough fuel to burn for 45 minutes. It was powerful enough that the team was asked to engineer components for the torch that opened the 2002 Winter Olympics in Salt Lake City.