Tech students serve as mentors for robot-building competitions

Larry Bowie
Institute Communications and Public Affairs

Students from high schools across Georgia are preparing to compete in the largest robot rivalry in the nation. Called FIRST (For Inspiration and Recognition of Science and Technology), the annual competition encourages students to develop new analytical skills as they engineer robots for competition in sporting matches.

Each year, Georgia Tech students act as mentors to local teams and help secure sponsorship. This year, students are working with teams from Wheeler High School and Roswell High School. The teams will participate in a regional competition at the Gwinnett Civic and Cultural Center in late March. Should they advance, they’ll head to the championship event in Houston on April 10, where they would compete with teams from Canada, Germany and Brazil.

The students met after school and on weekends at Tech for six weeks, building their robots from scratch. To do so, they must tackle a multitude of engineering problems during the planning, design, building and testing phases. The competitions are high-tech sporting events, the result of months of brainstorming, teamwork, dedicated mentoring, project timelines and deadlines.

“It’s not easy,” said tenth-grader Tauhira Hoossainy, 16, a member of the Wheeler High School team. “I do drafting engineering, but never anything like this before. Choosing a design was probably the most difficult because we all have different ideas.”

In January, FIRST sent entrants a manual defining the rules for constructing a robot and the games. The robots are built to pick up and move large containers and stack them one atop the next. The goal is to move the containers into scoring positions on the playing field while stacking as many as possible. The team with the highest score wins a match.

“The hardest part is making everything work together,” said Roman Shlyman, 16. “It’s a big challenge and takes a lot of teamwork.”

Two engineering students from the Robobricks Robotics Club at Georgia Tech — Anne Bergeron and Jeremy Roberts, both seniors majoring in mechanical engineering and computer engineering, respectively — acted as mentors throughout the project.

“This is one of the greatest hands-on experiences that high school students can get in the area of engineering,” Bergeron said. “It gives them an opportunity to apply the math and science they learn in school in a competitive project to design and build a machine that’s also a competitor. It gives everyone a great feeling of accomplishment.”

Name change reflects expanding mission of Cooperative Division

David Terraso
Institute Communications and Public Affairs

When they went home for the weekend, they were staffers for the Cooperative Division. When they came back, they were employees in Tech’s new Division of Professional Practice.

No longer just the co-op office, the new division is adding an undergrad-uate professional internship to its current array of programs that include co-op and international co-op. The new internship initiative will give students the opportunity to earn course credit while interning at companies all over the country and international-ly as well.

“This office is expanding its mission to give professional experi-ence to students whose majors don’t traditionally lend themselves to co-op,” said Tom Akins, executive director of the new division. “Our new undergraduate professional internship program will allow employ-ers who aren’t able to make the long-term commitment that our co-op pro-gram requires the chance to benefit from the professionalism and expert-ise of Georgia Tech students.”

Started in 1912, Tech’s co-op program is the fourth oldest in the coun-try. Boasting more than 3,000 stu-dents and 700 employers, it is also the longest optional co-op program in the country. It was ranked first in the country among public institutions.

In Remembrance:
John Uyemura, electrical and computer engineering

Jackie Temeth
Electrical and Computer Engineering

When Professor John Uyemura died on Feb. 3 from a heart attack, the faculty, staff and students in the School of Electrical and Computer Engineering (ECE) not only lost one of their greatest intellectual minds, but also a beloved and trusted friend who possessed a distinctive charisma and character and a tremendous capacity for love and friendship.

Known as the “Samurai Professor,” Uyemura was a dynamic, demanding, and entertaining classroom teacher who helped to build many courses in the School’s curricula and had one of the highest teaching ratings in ECE across a broad range of undergradu-ate and graduate courses and elec-tives. In particular, Uyemura devel-oped courses that interface between analog and digital integrated circuits, said William Sayle, associate chair for ECE Undergraduate Affairs. “He often taught four courses in a quarter, something virtually no other ECE faculty member has ever done,” Sayle said. “And he always taught them well.”

John Buck is an ECE associate professor and also a friend and for-mer student from Uyemura’s days at UC-Berkeley. “John did things in the
Michael Hagerty
Institute Communications and Public Affairs

"There is reason to question the bona fides of the French and the Russian governments, both of which have signed major contingent oil contracts with Saddam Hussein's government pending the lifting of sanctions. And so they see a great commercial stake for France and for Russia in putting the finger in the U.S. eye, blocking efforts to unseat the regime ... leave Saddam in power and benefit commercial interests all over the world.

—John Kelly, an associate at Tech's Center for International Strategy, Technology and Policy, speculating on the reluctance to support war with Iraq. (Atlanta Journal-Constitution)

"The invisibility and the nonvolatility of it can be uncomforitable. They are just a sort of frightening thing to look at, and they remind you of how little control you have over your own life."

—Richard Barke, professor in the School of Public Policy, on the misperception that high-voltage electric transmission lines may pose health risks. (Augusta Chronicle)

For much of the campus, Institute Communications and Public Affairs (ICPA) acts as a consultant and producer of information, helping colleges, departments and organizations shape and deliver effective messages, tailored for a particular audience through an array of print, video and Web projects. But part of its mission is to ensure that these projects also accurately reflect Tech and its strategic mission.

The Georgia Tech name, its reputation, is an extremely valuable brand," said Bob Hartly, executive director of ICPA. "It is what influences students to apply, alumni and friends to donate, corporate partners to seek out research opportunities, and elected officials to come to us for advice or provide us with funding. When people see dated, incorrect or conflicting information about the Institute, it can damage our reputation.

Through the creation of a new ICPA Toolbox, we're attempting to address that problem.

"As with many things in cyberspace, obtaining reliable, up-to-date information about Tech is a dicey proposition. That's true for people on campus, as well as for Tech audiences all over the world. Once information is published electronically, it can quickly become outdated or erroneous.

"So we've made it our responsibility to create an information repository about Georgia Tech for everyone in the Tech community to use," said Hartly. "At an institution where so many are working so hard from so many different places, it makes sense to have a repository where the whole Tech community can find accurate information about Georgia Tech. This will not only enhance the Georgia Tech brand, but also provide offices and individuals throughout the Tech community with reliable information."

With the recent launch of the newly designed Tech Web presence, ICPA sought to provide core information about the Institute in a useful fashion. By creating a "toolbox" that on-campus constituencies may refer to for the most up-to-date information about Tech, there is a far better chance that key audiences will find timely, accurate information about the Institute.

"When communicating with off-campus audiences, it's important that we provide accurate information that re-enforces some of the larger Georgia Tech themes," Hartly said. "Presenting consistent information increases our credibility and strengthens the value of our brand."

Ease of access and consistency of message are two of its strengths. ICPA hopes that by making all of this information readily available in one location, it will greatly enhance the materials and messages developed by communicators across campus.

Available to Tech faculty and staff, the toolbox provides campus communicators with some of the materials necessary to create and maintain communications products. The resources include:

• Online access to thousands of photos from the ICPA photo collection;
• Facts, such as enrollment, rankings, academic offerings, and other strategic information about Georgia Tech;
• Print and electronic resources such as logos and Web templates;
• Media resources, with links to staff- and student-run publications; and
• Legal disclosure information.

Hartly emphasized that this was a first step in providing the entire Tech community with communications materials for their use.

"Content will be continuously updated, depending on the feedback from our audiences and users. We will continue to develop new materials that enhance the Tech brand," he said. "We want to ensure that everyone on campus has the messages and the materials to use with their key audiences. This is a step in that direction."

For more information...
Institute Communications
Public Affairs
www.gatech.edu/icpa

Uyemura, cont’d from page 1

classroom that no one else I knew would have thought of. His lecture style was unique, and I must confess that I have tried to copy it," said Suk. "He worked his magic on students, made them learn, made them better professionals — and better people."

Many of Uyemura’s colleagues noted that he would often incorporate other attention-getting techniques into his teaching style that also had real world applicability. "Watching John teach was like watching a performance. He would get very excited and the pitch of his voice would rise as he made points," Sayle said. "In some of his courses, he would run the lectures like a company meeting. Sometimes he would have the students do calisthenics, just like Japanese companies required. This practice was to prepare our students to compete on the world scale."

A recipient of the Georgia Tech Outstanding Teacher Award in 1986, Uyemura was not only much respected and loved by his students, but also by his colleagues throughout Georgia Tech. The Center for the Enhancement of Teaching and Learning (CETL) routinely asked Uyemura to give seminars to young, tenure-track faculty known as CETL Fellows.

"No one came away from his seminars without being significantly affected," said Billiee Pendleton-Parker, assistant director of CETL. "His passion for teaching and for mentoring his students revealed the essence of who John was as a professor.

Uyemura’s reach extended beyond Georgia Tech, as he was a prolific textbook writer, with six to his credit. A seventh book, "Deep Submicron CMOS Design," will be published later in 2003. Regents’ Professor Thomas Gaylord said Uyemura was one of those rare individuals who could see the big picture in integrated circuits. "He understood all levels — from basic physics to system applications. He was never able to find a textbook that had all the needed concepts, so he always wrote his own textbooks as he taught his courses. He was famous for his depth of understanding and clarity of presentation. In a time of blinding technological pace, John was always out in front."

Born Dec. 6, 1952, in Denver, Uyemura received his bachelor’s, master’s and doctoral degrees in electrical engineering and computer science from the University of California at Berkeley in 1973, 1977 and 1978, respectively. After earning his Ph.D., he joined Tech as an assistant professor in ECE. He was promoted to associate professor in 1984 and to full professor in 1992.

The John P. Uyemura Memorial Fund has been established for the future education of his daughters. Donations may be made at any branch of Wachovia Bank by referring to account #15112189. For more information about the fund, call Julie Young at 404-512-5854.

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‘Toolbox’ new resource for information about Tech

www.whistle.gatech.edu
Library to measure service quality with survey

Sean Selman
Institute Communications and Public Affairs

Some faculty and students may receive a new PalmPilot or campus gift certificates good at the Georgia Tech Bookstore or Computer Store if they participate in an upcoming survey for the Library and Information Center.

Beginning in mid-March, a random sample of 500 undergraduate students, 600 graduate students, and 600 faculty members will be invited by e-mail to participate in the library’s first LibQUAL+ Survey. It is a large-scale, user-based Internet survey of library effectiveness, developed by the Association of Research Libraries in collaboration with Texas A&M University.

Librarian Kathy Tomajko said the survey helps the Library and Information Center gauge the general attitudes of its users, as well as their overall level of satisfaction with the libraries’ services.

“The survey uses a random-sampling technique of each academic community,” said Tomajko, the on-site liaison for the LibQUAL+ Survey at Georgia Tech. “It takes about 10 or 15 minutes to complete, and there are about 40 questions. Of course, participation is voluntary, and responses are completely confidential.”

Co-ops, cont’d from page 1

first among optional co-op programs and third overall by U.S. News and World Report.

Students who take the new 12-16 week internship will work full time and be allowed to keep their current full-time students, said Bob James, director of the undergraduate professional internship program who spent 27 years with the old Cooperative Division. To ensure that they are getting real work experience, both students and employers will issue reports tracking the progress of the internship.

Internships won’t just be limited to Atlanta companies. In fact, businesses nationwide have already started contacting James expressing their interest in participating.

Currently, James is busy recruiting employers and students for the upcoming summer session, but this semester three companies — BMW, Advanced Micro Devices and Kim King — are already hosting student interns.

Students who want to intern will have at least 50 credit hours under their belt before starting work. According to Akins, they will also undergo an orientation, similar to that of co-op students.

To help with the added workload, Akins added two new staffers in January to the new division. Suanne Cotter is the new marketing specialist, and Mary Fisher is the advisor to the undergraduate professional internship program. Harold Simmons moves from being an associate director of co-op to the director of cooperative education services.

Internships will still be available through the Career Services office. The main difference between the two programs will be that while the new division’s internships will be full-time positions, the Career Services’ program allows for part-time internships in addition to classes. Both programs offer students the opportunity to augment their academic programs with practical experience related to their major and long-term career interests.

Director of Career Services Ralph Mobley said, “The variety of internship programs on campus will provide students with multiple opportunities to connect with employers, experience the world of professional work and round out their education.”

“Together with Career Services’ internship program and the undergraduate research program, the Division of Professional Practice will help students continue learning beyond the classroom,” said Akins.

Tomajko said 2003 marks the fourth year that the LibQUAL+ Survey has been offered nationally and the first time that Tech is a participant. The inaugural LibQUAL+ Survey in November 1999 gave officials at North American academic libraries their first opportunity to assess returns on their annual investments in terms of user evaluations of service quality. It’s an effort to measure library service quality and identify best practices,” Tomajko said.

“It’s also an opportunity for us to compare and benchmark ourselves with other academic libraries. Once the data is collected, it is reported back as aggregate mean score data. We plan to use the data and what we learn to identify what the library is doing right and what we need to improve.”

Results will help library staff determine future service improvements.

LibQUAL+ Surveys are funded nationally through a variety of means, including external funding from the U.S. Department of Education’s Fund for the Improvement of Postsecondary Education. Additional funding is provided by the Association of Research Libraries and Texas A&M, plus fees from participating libraries that underwrite survey production.

Officials from the Library will send out invitations to participate in the survey in mid-March, and the survey will be available online through early April.

For more information,
Library and Information Center
www.gatech.edu/libraries
LibQUAL+ Survey Project
www.libqual.org

IN BRIEF:

Engineering appoints associate deans

Last week, College of Engineering Dean Don Sainfort announced the appointment of Professor Ray Vito as Associate Dean for Academic Affairs and Professor Francois Sainfort as Associate Dean for Interdisciplinary Programs, respectively, effective March 1.

Vito is a professor in the School of Mechanical Engineering and Sainfort is a professor in the School of Industrial and Systems Engineering. It is expected that they will divide their time equally between their office and academic duties in their respective schools.

Sainfort cited a need for the College of Engineering to take on a more active leadership role in engineering education, faculty career development and the pursuit of interdisciplinary research. He said he believes these appointments are the beginning of that effort.

New entrepreneur-in-residence for ATDC

The technology business world has changed dramatically since MindSpring Enterprises began providing access to the Internet back in 1994.

But the principles of customer service, targeted marketing, partnership-building and frugality that fueled MindSpring’s growth remain just as relevant today, says Lance Weatherby, former executive vice president of EarthLink — whose merger with MindSpring ended the nation’s third largest Internet service provider.

Weatherby, who joined MindSpring in 1995 as market development manager, is the newest entrepreneur-in-residence at the Advanced Technology Development Center (ATDC).

In this role, Weatherby will share his experience with ATDC companies who are themselves in early stages of development.

“If you look at the important companies that have come out of the Atlanta technology community, a good many of them have started at the ATDC,” he said. “There’s something going on here that companies want to be part of. Is it know how to help companies grow their businesses, and I intend to help ATDC companies move forward.”

IPST receives technology donation

At the end of 2002, Nimbert-Clark Worldwide donated proprietary technology to the Institute of Paper Science and Technology (IPST). The technology, generally embodied in two U.S. patents, relates to a unique method for sulfonating cellulose fibers. IPST now owns the technology and the growth that fueled MindSpring’s growth remain just as relevant today, says Lance Weatherby, former executive vice president of EarthLink — whose merger with MindSpring ended the nation’s third largest Internet service provider.

Assistant Professor Art Ragauskas, who heads the fiber modification research program at IPST, will lead the research effort to bring these technological advancements to commercialization. “This technology estate complements the research and development that we have conducted within the Institute. It will further accelerate the development of practical fiber modification technologies that can then be made available to manufacturers throughout the world.”

Cheryl Perkins, senior vice president and chief technical officer of Nimbert-Clark, said “We are very interested in the technology and the partnerships with universities and research institutions engaged in education and research activities that align with our technologies. In the case of sulfonated pulp, it no longer fit our internal research program; however, it may be useful for industrial research.”

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Editor's note: A Feb. 17 feature noting President Wayne Clough's involvement in a class on natural gas deregulation in Georgia failed to mention that the course is also being co-taught by Jan Youle, a principal research associate at the Economic Development Institute, and Andrew Harris, director of Government Relations at Georgia Tech.
Feb. 26
Teatro Lirico d’Europa performs Puccini’s “Madama Butterfly” at 8 p.m. in the Ferst Center for the Arts. For tickets, call 894-9600.

Mar. 1
Modern dance troupe Piliobolus at 8 p.m. in the Ferst Center for the Arts. For tickets, call 894-9600.

Brown Bags/Conferences/Lectures
Feb. 27
The School of Mechanical Engineering’s Woodruff Colloquia Series welcomes Stanford University Professor Kenneth Goodson on “Thermal Engineering of Electronic Microstructures,” at 5:30 p.m. in the Emory Student Center AR. For more information, e-mail william.king@me.gatech.edu.

Feb. 27
The Harvard Club of Georgia sponsors a visit from Dr. Beatrice G. von Stosch to discuss “The Book Nobody Read,” exploring Gingerich’s research into the work and life of Copernicus, at 8 p.m. in the Clary Theater. A reception precedes the discussion. For more information, call 894-1962.

Faculty/Staff Development
Mar. 6
The Office of Sponsored Programs offers a course in “Public Responsibility and Research Commitments,” from 1 to 3 p.m. in room 119, Centennial Research Building. To register, refer to www.trainsweb.gatech.edu.

Mar. 20
The Center for the Enhancement of Teaching and Learning’s Faculty Development Series presents “Using A Wireless Audience Response System In A Large Class,” featuring Physics Associate Professor Michael Schatz and College of Sciences Associate Dean Rent Barefield, from 11 a.m. - 1 p.m. in the Library’s Homer Rice Center. To reserve a seat and box lunch, call 894-9418 or e-mail cetlhelp@gatech.edu.

Ongoing
Techmasters — Tech’s chapter of Toastmasters International for faculty, staff and alumni — meets every Thursday from 7:30-9 a.m. in room 102 of the Microelectronics Research Center. For more information, e-mail edgar.jones@ece.gatech.edu.

Miscellaneous
Feb. 25
Thomas Meredith, chancellor of the University System of Georgia, will make a presentation at the spring meeting of the General Faculty and General Faculty Assembly, from 3-5 p.m. in the Student Center Theater. A full agenda is posted at www.facultysenate.gatech.edu. For more information, e-mail said.abelkhalil@me.gatech.edu.

Feb. 27
Organizers for Relay for Life at Georgia Tech — an American Cancer Society fundraiser to be held on March 29 — will meet at 11 a.m. in room 227 of the Student Center. For information call 894-2002, or refer to www.relay.gatech.edu.

Mar. 6
For employees who are within ten years of retirement, a pre-retirement meeting will be held by the Office of Human Resources on social security benefits and Georgia Tech benefits from 1-4 p.m. in room 117, Student Services Building. To register, visit www.trainsweb.gatech.edu.

C L A S S I F I E D S
APPLIANCES
Scars refrigerator in working condition for free if you pick up. Call 385-0271 or e-mail benny@ece.gatech.edu.

AUTOMOBILES
1989 Cadillac Seville. 4.5L V8, champagne, tan interior, auto, 140K mi. Good condition & runs well. For everything, climate control, cruise, $1,200 OBO. Call 894-5243 or e-mail scott.slatede@business.gatech.edu.

1992 Honda Accord EX. Sunroof, A5, CD, power windows/locks. New tires, seats and windows, AM/FM/CD, power windows, cruise, power seats and windows, $2,600 OBO. E-mail mark.baran@icpa.gatech.edu or call 894-4283.

1995 Ford Explorer. Loaded, garage kept, non-smoker, original owner, $18,500. Call 404-312-0281.

2000 GMC Envoy. Pewter/champagne, 218K miles, extended warranty, Monsoon sound, OnStar system. Still under factory warranties, $22,000. E-mail glenn.moscoso@arch.gatech.edu or call 894-4265.

FURNITURE
Round, glass-top kitchen table set with four white wicker chairs comes with covered cushions and matching stand, $175. Photo available. E-mail mark.baran@icpa.gatech.edu.

Sofa bed, 74 in. long, Excellent condition, gray tweed. Off-white slipcover. $350. Call 894.4515 or e-mail mark.baran@icpa.gatech.edu.

Four-piece oak bedroom suite. Queen-size Sealy mattress and box spring included, $900 OBO. Call 770-777-9275.

Contemporary dining room set. 4 roll-top Parsons chairs (white/off-white stripe). 1 glass rectangular top with bases. Excellent condition, asking $150. E-mail rm.carrier@balumim.gatech.edu.

Two twin-size rollaway folding beds. Mattresses have springs, are in excellent shape, and are guaranteed. $6,000 each. Call 894-2682 or e-mail c7t@prism.gatech.edu.

REAL ESTATE/Rental/Mortgage
For rent: 3BR/2BA ranch and 2-car garage, wooded lot w/fenced back yard. $174,900. Call 894-9418 or e-mail mark.baran@icpa.gatech.edu.

For rent: 3BR/2BA ranch near Emory/DJC. 1927 brick ranch near Emory/CDC. $2,200 OBO. D. Call 894-4615 or e-mail ellien.urbanski@dev.gatech.edu.

For rent: 3BR/2BA ranch, vaulted ceilings, sun room, 2-car garage, 5-acre, fenced back yard, 2,200 sq. ft., less than 1 yr old. Relocating taxes. E-mail jmalko@icpa.gatech.edu.

For rent: 1BR/1BA condo for rent. Midtown, garage, wooded lot w/fenced back yard. $1,100/mo. Call 404-966-0848.

For rent: 3BR/2BA ranch near Emory/CDC. 1927 brick ranch near Emory/CDC. $2,200 OBO. D. Call 894-4615 or e-mail ellien.urbanski@dev.gatech.edu.

SPORTS/TENNIS/HORSEBACK RIDING
Welder gym sel., $200 OBO. Call 770-577-9273.

MISCELLANEOUS
Amigo RT Express power scooter. Blue, comes with 2 chargers, 2 new factory-sealed batteries, backpack and tiller bag. $1,000. E-mail glenn.moscoso@arch.gatech.edu or call 894-4283.

Ivy size 14 wedding dress and veil. New shoes, size 8MM, never worn. Paid $340, asking $175 for all. E-mail ms287@prism.gatech.edu.

Organizers for Relay for Life at Georgia Tech — an American Cancer Society fundraiser to be held on March 29 — will meet at 11 a.m. in room 227 of the Student Center. For information call 894-2002, or refer to www.relay.gatech.edu.

For employees who are within ten years of retirement, a pre-retirement meeting will be held by the Office of Human Resources on social security benefits and Georgia Tech benefits from 1-4 p.m. in room 117, Student Services Building. To register, visit www.trainsweb.gatech.edu.

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Editor's Note: Only faculty and staff may submit classified ads via e-mail to michael.hagearty@icpa.gatech.edu.

Ads will run for a maximum of three weeks in the order in which they are received. The Whistle reserves the right to edit ads longer than 30 words.