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TECHNIQUE
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Think Green Week

Reduce, re-use, recycle gets new meaning with innovative eco-celebration

By Kate Comstock
Focus Editor

Georgia State art students created installations out of waste material in celebration of Earth Day.

This Friday marks the thirteenth celebration of Earth Day on Tech's campus. With environmental conscientiousness a growing concern nationally and at Tech, green issues are enjoying more visibility and enjoying more practical impacts.

The week features several events that aim to educate and inform the community about ways to become environmentally friendly and week's finale is the Earth Day celebration at the Campanile on Friday, April 23 from 10 a.m.-2 p.m..

The Earth Day celebration at Tech is one of the largest celebrations in the Southeast and this year the event will be the largest yet. It will include 72 booths that will provide information to students and faculty about including "green" practices in their everyday lives.

"We really wanted to make it interactive and make it a fun event for students, faculty and staff. We want them to take that information [from Earth Day] and use it in their personal lives," said Cindy Jackson, Manager of Solid Waste Management and Recycling at Tech and the main organizer of the Think Green Week and Earth Day activities.

The aid in the goal of creating an event that is entertaining and informative, the celebration will have two bands performing on Friday. There is also a plethora of events that students can partake in to learn more about green initiatives.

RoboJackets extend metallic hand to high schoolers

By Andrew Nelson
Staff Writer

Paper brochures, e-mails from admissions and information sessions may not always persuade prospective students to consider Tech as the college of choice, but what about the opportunity to learn engineering skills while building robots with Tech's engineering students?

The student organization RoboJackets offers a hands-on perspective of engineering as well as a unique view of what high school students would have access to as Tech students. During the fall semester, RoboJackets hosts Technology Enrichment (TE) Sessions, taught by its members—primarily Stefan Posey, fifth-year AE and president of RoboJackets, and Andy Bardagjy, fifth-year EE and project leader of TE Sessions as well as several professors, like Dr. Wayne Book, for high school students.

"In 2001, [RoboJackets] started hosting these seminars called TE Sessions. We meet once a week for about three hours, and we go through basic physics and mathematics to teach [students] how to build one of the smaller robotics kits," said Bardagjy.

The primary goal of TE Sessions are to give students from over 30 high schools an edge as teams in FIRST Robotics—a national non-profit organization that hosts robotics competitions for grade-school students—with college-level education and personal-level contact with engineering students. The majority of participants are high school students, but some exceptional middle school students have attended sessions as well; Posey said there is one group that started in middle school and are still participating.

Each week, teams from over ten high schools pack into a room with several RoboJackets members for about three hours. First, a half-hour lecture by a member covers the day's activities, and then they start a lab-style activity where students build and test with Lego Mindstorms. Since the students are from all four levels of high school, some students may not have experience with physics or higher-level mathematics; thus creating a challenge

"There this huge range of experience [among students]; some of them are Linux kernel hackers and some come in with algebra one,"

New CoC Dean provides experience, accolades

By Chris Russell
Online Editor

Tech is preparing to welcome a new dean for the second time this semester, this time of the College of Computing (CoC). Zvi Galil will be taking over from Jim Foley, who has served for two years as the college's interim dean.

Foley said, "Everyone in the college has been great over the past nearly two years while I have been Interim Dean. We've pulled together to continue to strengthen our programs, so that despite a million dollars in budget cuts over the [year], the college is in excellent shape for our new dean. The quality of our students continues upward, new research awards are up by over a third [versus] last year, and enrollments are climbing."

As dean, Galil will act as the college's leader and main representative on campus.

A statement on the CoC's website, **www.cc.gatech.edu** said, "As the chief academic and administrative officer, Galil will report to the provost and provide overall strategic direction for the college, with particular focus on the faculty's aspiration to define a new generation of computing through its three academic units: the School of Computer Science, the School of Interactive Computing and the School of Computational Science and Engineering."

One of Galil's goals for the college is expanding it's interdisciplinary programs.

In a talk he gave on-campus in March as part of the selection process, Galil said, "Computers have become central to our existence and our well-being. Computing supports science in an essential way, providing an exploratory instrument that accelerates discovery in all branches of science and engineering...The more the College of Computing collaborates, the more central it becomes to institutional success."

"I am confident that Dean Galil will work with all of us to continue [our] strong record of achievement and growth," Foley said.

Most recently, Galil was the president of Tel Aviv University in Ramat Aviv, Israel, a position he has held took in 2007 and stepped down from in 2009.

In 1987, he was named the Julian Clarence Levi Professor of Mathematical Methods and Computer Science at Columbia University before becoming the Chairman of Columbia's Computer Science programs two years later. In 1995, he became the Dean of the School of Engineering and Applied Science.

Galil's resume is stocked with honors and accolades. He has served at the head of half a dozen organizations, ranging from the chairman of SIGACT (Special Interest Group on Algorithms and Computation Theory) in the Association for Computing Machinery to serving as editor-in-chief for the J*ournal of Algorithms*.

Galil has authored over 200 papers and articles, and has given 150 talks in over 20 different countries. He is also an ACM Fellow.

Galil received a PhD in Computer Science from Cornell University in 1975.

Zvi Galil, who served as president of Tel Aviv University, was named Dean of the CoC.

Robot

Bardagjy said, "We have to hit somewhere in there to keep everyone engaged."

One of the ways they meet that goal is by offering an advanced track, started three years ago, in addition to their general track of sessions. Students who have no exposure in robotics are encouraged to start with the general sessions, but as they become more experienced they move into the advanced sessions.

"Often when [RoboJackets] gets new members, they really want to do this but they're not too familiar with robotics. We usually steer them into these programs... and both work with high school students and learn how to do basic work in robotics," Bardagjy said.

The advanced track usually consists of college-level material similar to special-topics classes at Tech, like robotics-specific programming and computer vision; college students, especially unexperienced RoboJackets members, have also participated in the advanced sessions alongside high school students.

"We also have a competition at the end of the sessions, which is open to all the teams [who participated in TE Sessions]. It's hosted by [RoboJackets] and the College of Computing, and this past year I had a speaker from General Motors come and give a talk about hybrid engineering," Posey said.

RoboJackets hosted the annual FIRST Robotics Competition kickoff event this January at the Ferst Center, attracting over 40 FIRST teams from the Southeast. Of the teams present, 14 participated in the RoboJackets' workshops to receive mechanical and strategical advice and experience for the competition ahead.

Since moving to the lab format of TE Sessions, RoboJackets have started a project to compile a workbook that, once completed,

will serve as a guideline for the sessions' organization and content. It is expected to include introductory and advanced topical information as well as associated activities for the labs.

Given the price tag on enough hardware to teach students with expensive robotics kits, operate and maintain heavy machinery and to fund Robojackets' own activities and projects, nearly the entire budget is covered by corporate sponsorships.

Robojackets also competes in Robocup, Intelligent Ground Vehicle Competition and Battlebots. In Robocup, a team builds five coffee can-size robots to play soccer. In Intelligent Ground Vehicle Competition, a team designs, builds and programs a fully autonomous robot to navigate an obstacle course; in Battlebots, a team builds a robot that simply destroys and survives the efforts of competitor robots.

A top priority of RoboJackets' officers is recruiting new members, and TE Sessions alumni are a major component of that recruitment of high school students participating in TE Sessions and subsequently attending Tech after graduation. One past member now serves on the FIRST Board for game design. However, with the Tin Building—where RoboJackets bases their operations and host workshops for FIRST teams—facing demolition and relocation off-campus, maintaining the same level of recruitment from high schools and Tech freshmen may be difficult.

"A big problem is our members operate at odd hours, and not having a place on campus is going to make it difficult to recruit people," Bardagjy said, "All the teams are concerned about what's going to happen to the organization if we can't recruit more members. As a freshman, I wouldn't want to walk through Home Park to join a club I'm not sure about."
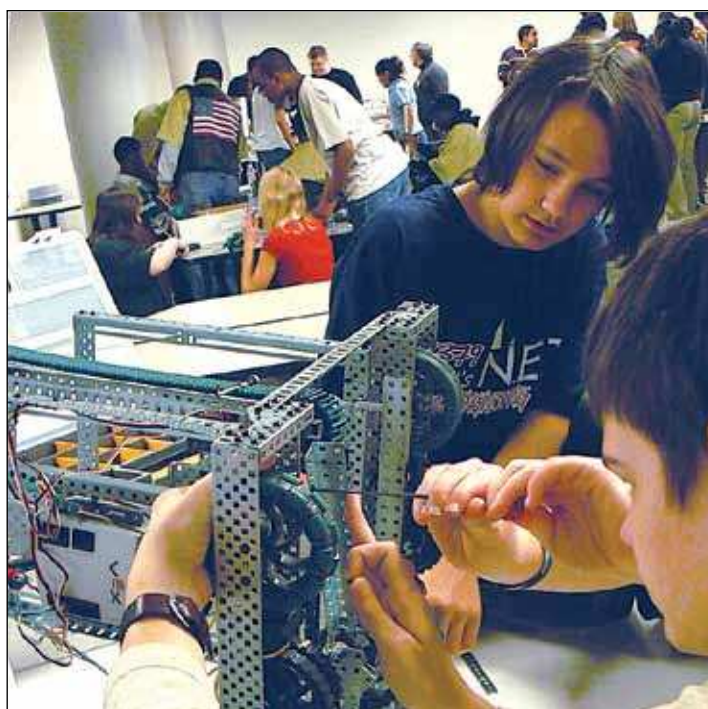

Photo by Doug Kim/ *Student Publications*
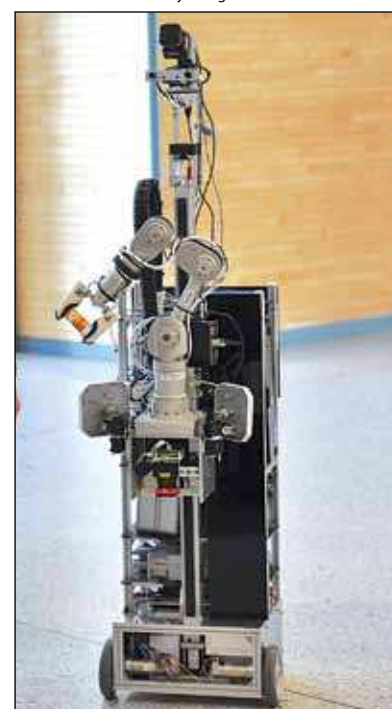

Photo courtesy of Stefan Posey

Photo by Doug Kim/ *Student Publications*

Students participate in creating robots for the FIRST competetition and observe new robotics technology at the CoC during two of RoboJacket's demonstrations for high school students.

Erato: celebrating 40 years of student expression

By Reem Mansoura
Development Editor

Erato. The name might make you think of something risqué or erotic. The truth, in fact, might shock you more than your imagination. At a school so heavily focused on engineering and science, *Erato* is Tech's Creative Arts Journal.

Erato was founded in 1969 by a student named Richard Sawyer, who wanted a publication dedicated solely to the artistic endeavors of Tech students. In 1979, *Erato* lost funding from the Student Government Association (SGA) but was still able to self-publish an issue. *Erato* remained unpublished for five years before students were able to revive interest in the publication. A new budget was set, and *Erato* published bi-annually and annually, depending on budget constraints.

Erato now publishes annually, with submission deadlines set for early in the spring semester. This publication contains pieces of poetry, prose, photography, drawing, painting and digital painting which were submitted by Tech undergraduate and graduate students, faculty and staff.

This past year, *Erato* celebrated its 40 anniversary issue with a launch party on Monday, April 19. The launch party consisted of an *Erato* birthday cake and an exhibit of all past issues.

"We celebrated the 40th Anniversary issue with a year-long history project, an attempt to find out where we came from to decide how to move forward," said Amaris Gutierrez-Ray, fifth-year STAC and Editor-in-Chief of *Erato*.

"There's been a lot of disconnect over the years and not many editors have passed their stories down, so finding out that we lost funding for the last half of the 1970s was a surprise," Gutierrez-Ray said.

"I decided to look for *Erato* in all the *Blueprints* and *Techniques* since we were created in 1969. I ended up working with the Archives and the Alumni Association to fill in the gaps—to find issues we didn't have and names of editors who could tell me more. We put together a brief overview of our history in this year's journal, and we invited all the alumni I spoke with to our launch party," Gutierrez-Ray said.

When asked what impact this 40th anniversary issue has on the Tech community, Gutierrez-Ray said, "I think that kind of campus outreach was monumental for us this year. We've started taking ourselves seriously as a historical publication at Tech, and through extended campus outreach [such as] more events and more distribution racks, people can start to see that for themselves."

"Though the importance of a literary magazine or journal on the campus of a technology institute may sometimes be forgotten, I believe *Erato* is an essential outlet for the creativity of students on campus as both an impetus and stimulus for creative writing and artwork as well as a way for students to showcase that work," said Julia Turner, second-year STAC and one of next year's co-Editors-in-Chief of *Erato*.

Erato not only publishes an annual journal, but also hosts open mic nights where attendees can come and share their poetry or prose. In addition, *Erato* hosts a reading series where poets and prose writers from the community share their work with Tech students. The 40 anniversary issue provides an example of the creative potential of Tech students.

"In the next few years I think we can do amazing things to join disciplines and create a creative commons or campus community of interdisciplinary creativity," Gutierrez-Ray said, "We hope to take our history into the future to reach an even broader readership consisting of cross-college communication and collaborations with the other print publications on campus."

Copies of the anniversary issue can be found in distribution racks across campus in the Instructional Center, the Library Rotunda, the D.M. Smith entrance, the Student Center and the Publications Office in the Flag Building.

Artwork of Cassie Xie

Artwork by Todd Levin

Erato features original work by students, like the photographs shown above, and also includes short stories and poetry.

Green

Among those activities is "Shoot the Shoes," which allows students to bring in their old sneakers to throw through the basketball hoop set up at the Campanile and then donate the shoes to the Nike Grind project-a project that de constructs used tennis shoes and then grinds the material to create new athletic surfaces like playgrounds and tracks.

The day will also provide students the opportunity to participate in many recycling activities like a clothing swap and an office supply exchange. Also, all of the food served at the Earth Day celebration will be served in biodegradable materials and all of the extra food will be composted through Sodexo's compost program. The committee of Earth Day aims to create zero waste during the event.

There were also many events that took place over the week to celebrate Think Green Week. This is the third year of the week where green-minded occurrences are scheduled around campus. Think Green Week stretched into a week long event three years ago when many people and sponsors suggested to Jackson that they spend an entire week informing others about environmentally friendly subjects.

The Green Rally, held on Monday, April 19, was the kick-off event for the week and there were several "freebies" for students that took part in pledging to go "green" in 2010. The giveaways included compact fluorescent light bulbs,

Photo by Jarrett Skov/ *Student Publications*

Above: artwork made out of plastic bottles, Right: students receive energy efficient lightbulbs at the Campanile on Monday.

totes and reusable water bottles.

An eco-fashion show was held on Tuesday to showcase fashionable outfits that were made using renewable materials or re-used clothing. Most of the re-used clothing was donated from the Salvation Army and designers featured their clothing on a catwalk on the student commons stage.

Institute president G.P. "Bud" Peterson's wife, Val Peterson, even took part in the festivities this week by modeling in the fashion show and wearing the shawl she created from remnants of unused garments. Peterson included special details like a button from her great-grandmother's dress that she wore when she came to America for the first time from Holland.

Wednesday featured a meet and greet with the artists of the

Garden of Growth installations located in the grassy area next to the Campanile. The installations were created by Georgia State art students and were constructed using only recyclable materials.

"[The] whole concept was to take recyclables from Tech and take that waste and create sculptures that stand for the week and then get recycled," said Jackson.

Students were the main initiators of contact between collaboration projects at other schools. Students from Georgia State, Emory and Morehouse are expected to attend the event.

"Another mission of the Earth Day Committee is to reach out into the greater community, so I looked to involve as many groups from inside and outside of Tech as possible. I was fortunate in discov-

Photo by Dean Liao/ *Student Publications*

ering renowned found-object/sustainable artist Pam Longobardi, who is an art professor at Georgia State, for she not only helped me shape the idea but she also offered the support of her "Public Installations" art class. As such, about 20 GSU art students collaborated with GT students to build some truly incredible and beautiful sculptures," said Chris Olson, fourth-year IsyE and member of the Earth Day committee.

Think Green Week even featured a film on Thursday called, *Coal Country*, that highlights

what happened to the environment in Appalachia during the coal mining process in the area.

Think Green Week and the Earth Day celebration had several sponsors, all of which are located on the website, **www.earthday. gatech.edu.**

Other than the committee that led the project, the Environmental Alliance at Georgia Tech (EAGT), Student Organization for Sustainability (SOS) and the SGA Sustainability Task Force were instrumental in helping create and organize all of the events.