InVenture highlights students' ingenuity

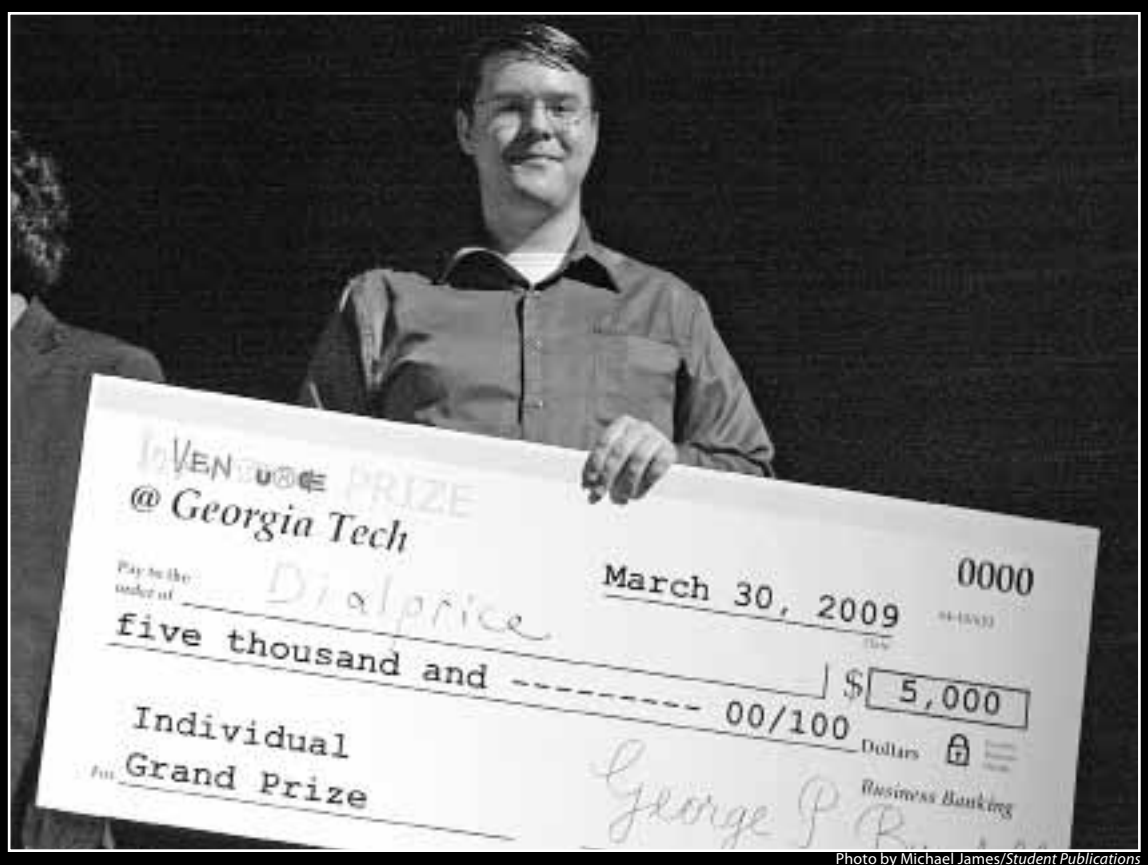

Photo by Michael James/*Student Publications*

DialPrice inventor Roger Pincombe took first place as an individual winner, winning $5,000.

By Emily Chambers and Jonathan Saethang
Outreach Editor / Development Editor

Enterprising Tech students got to stretch their creative minds this year with the InVenture Competition for a shot at thousands in prize money, patent filings and paid summer internships to work on taking the next steps in developing an invention.

The InVenture prize is a Tech initiative created to foster student innovation. The competition consisted of three rounds starting in November with a grand prize of $10,000 for the winning team and $5,000 for the winning individual, along with the opportunity to present their business plan at an innovation competition in Hong Kong. The InVenture individual and team winners were announced on March 30.

The winners also received free patent filings from the Georgia Tech Office of Technology Licensing and other resources to help develop their ideas further. According to the InVenture website, entries were scored on the following criteria: innovation, marketability, market size, inventor passion and probability of become a successful business.

The individual prize went to DialPrice, a phone service that allows users to check competitive product prices from any phone. DialPrice was invented by Roger Pincombe, a third-year CS major.

"You can use it from any phone…you don't need a data plan, smart phone or anything like that. It is a [voice over internet protocol] system that answers the phone call, reads in the key presses and looks up the UPC code. The system tells you the price of the item at similar stores and outlets," Pincombe said.

The idea for DialPrice arose during a Yahoo! Programming competition called Hack Week held last year, and Pincombe worked independently on the project until entering in the InVenture competition.

"I think that it is a great idea that Tech is trying to increase entrepreneurship within the community. It's one thing we kind of lack, as there is not enough focus on building our own businesses and being inventive," Pincombe said.

Photo by Michael James/*Student Publications*

The inventors of the Chlorocyte Bioreactor, above, placed first in the InVenture team competition.

Pincombe plans to invest the $5,000 prize in a more stable VOIP provider with better text-to-speech capabilities and hopes to partner with cell phone providers to offer the feature as a part of bundled services.

The winning team entry for the InVenture Prize was a Chlorocyte Bioreactor developed by inventors Joe Abrahamson, Will Boyd, Sanjay Challa, Kento Masuyama and Andrew Punnoose. The team's idea to research algae and its environmental applications formed last semester in September, even before the InVenture Prize was announced.

"We began investigating algae because it is very carbon negative…growing algae actually absorbs carbon emissions from the air," said Joe Abrahamson, a third-year BMED.

After hearing about InVenture, the group jumped at the opportunity to participate in the competition. In many ways, the InVenture Prize was a great motivator for the team to make progress on their ideas.

"[InVenture] was perfect for our team because it gave us incentives to develop our product and a timeline to produce it," said Will Boyd, a third-year CS and PHYS double major. "Since this was something we started even before InVenture was announced, we were all pretty passionate about it," Boyd said.

The team's invention consists of a photo bioreactor system and a harvester. The photo bioreactor system works by utilizing carbon dioxide emissions from sources like power plants to feed the algae. As the algae grows, carbon dioxide becomes bound in algal biomass. The harvester then collects the algae, which can be used for a myriad of other purposes. In that sense, the algae not only sequesters carbon dioxide but also is useful in other capacities.

"We realized that if the algae is grown directly at

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FC Blackout party encourages conservation

By Tamara Johnson
Contributing Writer

The rainy, gloomy weather all day Saturday may have deterred many students' weekend plans, but it was not an issue for the over 400 attendees of the Freshman Council's Blackout Party that night. The party did have to be moved indoors from the Campanile to the stage area of the Student Center Commons, but Freshmen Council managed to run the event with very few bumps.

The party signified Tech's participation in Earth Hour, a global event encouraging people worldwide to turn off all of their lights from 8:30-9:30 p.m. on a Saturday in March. Earth Hour initially began in 2007 in Sydney, Australia, where 2.2 million homes and businesses turned off their lights for an hour to "give the Earth a chance to breathe". The event became a worldwide sustainability movement in 2008 when 50 million people on all sides of the globe took part.

Amidst the food and music a petition by the World Wildlife Federation circulated around the room. "The petition is part of the WWF's "toolkit" for this event," Charbonnet said. "The global results of Earth Hour will be presented to the international delegations at Copenhagen. The petition encourages our federal government to ratify the Protocols and impose a cap-and-trade system on carbon emissions."

Global landmarks such as the Golden Gate Bridge in San Francisco and the Colosseum in Rome stood in darkness during the last Earth Hour, paving the way for notable Atlanta buildings to participate this year. The Bank of America Tower as well as the Coca-Cola building turned off their lights at 8:30 p.m., and students had a chance to go outside and take in the darkened skyline.

Joe Charbonnet, first-year ENVE major and Freshmen Council member received inspiration for the Blackout Party from his hometown of Gainesville, Fla.'s participation in Earth Hour last year. He presented the idea to the Council, and the movement began from there. "After emailing people [to participate in Earth Hour] the passion became contagious, and the student body became really excited," Charbonnet shared.

Notable guests in attendance included Buzz our mascot, who entertained the crowd throughout the night, and Kwanza Hall, member of the Atlanta City Council and advocate of sustainable initiatives in Atlanta. After a short speech, Councilmember Hall did the honors of switching a giant decorated light switch at 8:30, which turned off the stage lights and launched the night's festivities.

The night included performances by both indie rock band Foreign Breakfast and indie folk band Autovine, the latter remaining onstage for an encore performance. While the bands played students socialized around the darkened stage, talking with each other and munching on the snacks provided.

So why did some students feel that Earth Hour was important? "[This event] matters from the point of view of changing people's mindset," said Nick Wellkamp, undergraduate student body president. "Sustainability, the green movement…these have been buzzwords for the past few years, and many people still don't know what they mean."

A few students had other remarks about the event. Whitney

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Photo by Ben Keyserling/*Student Publications*

This light switch replica was turned off from 8:30 p.m. to 9:30 p.m. to represent the effect of Earth Hour.

GEORGIA TECH AUTO SHOW

ANNUAL CAR EXHIBITION DRAWS ALUMNI, STUDENTS

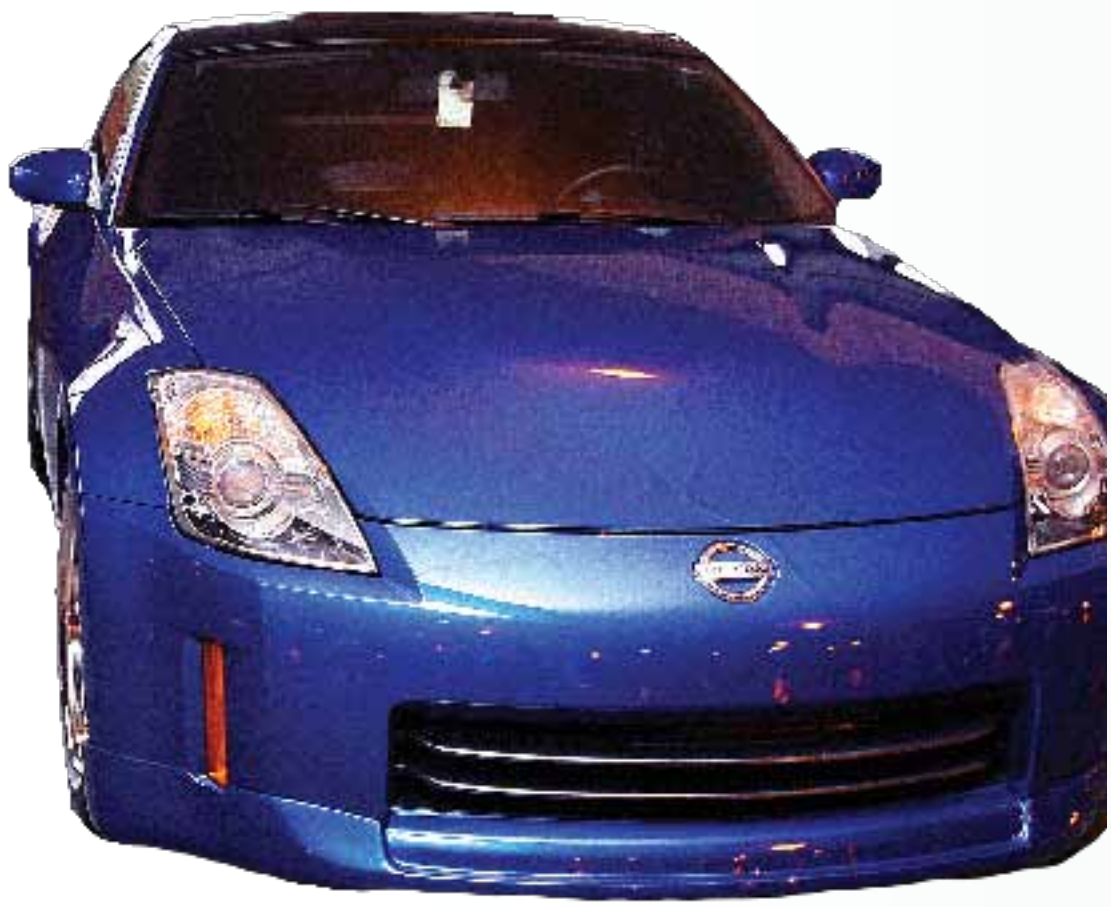


Photo by Eric Turner/ *Student Publications*

By Vijai Narayanan
Staff Writer

The sixth annual Georgia Tech Auto Show, held March 28, treated gear heads and car enthusiasts to a plethora of dazzling sights and sounds. From revered historical vehicles to futuristic alternative fuel cars, the show presented a wide range of vehicle classes and showcased highlights of the automotive industry over the past 100 years. Cars owned by students, faculty and alumni and were displayed along with motorcycles and some unconventional vehicles, like a three wheeled electric vehicle used for low-range commutes called the Zapcar Xebra.

The event was scheduled to occur in several West Campus lots. However, due to rain the event was relocated to the parking deck next to the Baker building. Spectator turnout was still relatively high, although the number of entrants dropped significantly due to the weather. Of over 250 registered vehicles, only 75 were present on the top deck of the parking lot. Still, the event boasted a variety of vehicles from the pre-WWII era to present day modified Scions and Porsches.

"This event is really about the Tech community coming together and sharing their love for all kinds of cars. We really don't say who can and can't come or what cars they can bring," said Mike Powell, EE '08. The deck was filled with alumni eager to share their stories about their cars and Tech. Gilbert Zeal, EE '60, drove through the rain from Pensacola, FL to the auto show in his yellow pastel 1965 Ford Thunderbird.

"This place has really changed since back when I came here. None of these buildings really existed," Zeal said, referring to the Biotech quad and the Nanotech building.

Among the more exotic cars present was the Elan Motorsports DP02, a racing car sold ready to race in the United States for around $90,000. Another crowd favorite was an authentic 1951 Hudson Hornet, still preserved with its original configurations and colors. Also present was a modified and custom painted 1961 Mini S owned by a Tech alumnus, which drew particular interest from the crowd. The Gas Hopper, an alternative fuel vehicle intended for low-range applications also drew interest because of its small structure and handle-driven operation.

Several campus organizations used the event to showcase their work. WreckRacing presented several cars at the show, with their modified Mazda Miata turning many heads. The EcoCar Challenge group, which aims to improve the fuel economy of a GM vehicle, was also present. The group aims to improve the efficiency of a 2009 Saturn Vue by 31% using E-85 Fuel in the engine. "We've got all sorts of people from different majors working on this project to help raise fuel economy," said Landon Reed, the Outreach Coordinator for the project.

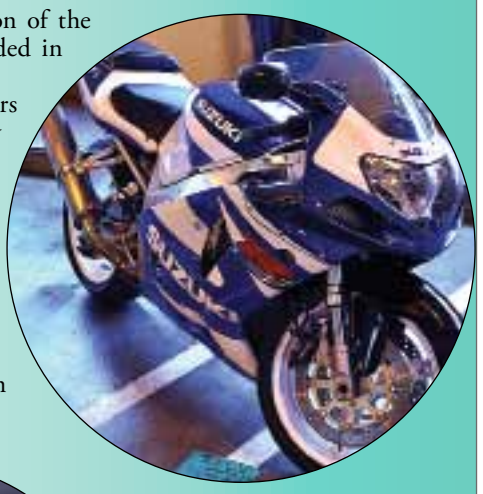
The event also had a guest speaker, Robert Englar, an aerodynamicist from GTRI who spoke at length about the importance of aerodynamics to a vehicle. Specifically, he detailed his team's collaboration attempt to break a class land-speed record with a modified Cadillac XLR on the Bonneville Salt Flats.

"It is important to understand what role aerodynamics play while driving because the same principles that apply to race cars apply to your SUV on the road," Englar said. He and his team were able to take the XLR up to 240.5 mph, just 1.5 mph shy of setting a world record.

The show also awarded prizes to the best cars in various categories, such as pre-WWII, post-WWII cars, modified, unmodified and alternative fuel cars. The winners in each category were awarded a trophy that consisted

of a digitized 3-D version of the Ramblin' Wreck embedded in a crystal piece.

"Over the past 6 years this event has filled my personal dream of having a place where car enthusiasts can get together and share stories, and I hope that we can continue this tradition for a long time to come," said Stirling Skinner, one of the main organizers of the event.



Phots by Doug Kim/ *Student Publications*

Photos by Eric Turner/ *Student Publications*

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convert carbon exhaust to clean exhaust while producing a valuable byproduct that can be used in many industries," Abrahamson said.

Developing such an idea over a period of a few months comes with challenges in itself. "Managing the scope of the project was a challenge," said Sanjay Challa, a third-year BMED. "A lot of [the work] was refining and limiting our scope into something we could tackle. The InVenture prize was helpful for establishing deadlines and making us do work that would get us somewhere."

The team plans to use the $10,000 in prize money to first seek legal advice in getting incorporated as an official business. The team has a six-month and a five-year plan, which includes filing two patents, building a board of advisors, starting a capital campaign and contacting power plants to begin discussing the possibility of implementing a prototype.

Two other individuals and four other teams were selected as finalists in the InVenture competition. Runner-up in the InVenture individual competition was Ryan Turk, a fourth-year ME and inventor of the HIV Medication Scheduler.

"[The HIV Medication Scheduler] is a medication device for illiterate patients that allows them to semi-independently take medication," Turk said.

Turk has taken his invention into the commercial sector by forming Time for Life, a company devoted to producing and distributing the medication schedulers throughout the developing world.

"Time for Life will be supported through a buy-one-give-one campaign in which you can buy a digital watch with regular functions, and for every one sold a medical reminder device will go to the developing world," Turk said.

The project recently was recognized with the Clinton Global Initiative Award and aims to distribute 250 devices in Haiti through the fall of 2009.

"The support we have seen for this project, whether it be through faculty members or even other students, has been great," said James Homesley, fourth-year MGT and managing partner of Time for Life.

The Time for Life team also includes Daniel Baily, Health Systems graduate student, Robert Poppell, fourth-year STAC, Anthony Mucciolo, fourth-year EE major, Jose Vidal, CMPE graduate student, Zach Van Schoyck, third-year ME and Nate Wilson, CS graduate student.

Another individual finalist Joy Buolamwini, a first-year CM, invented AdmissionsConquered, a web-based system designed to ease the college application process.

"I started in July of 2008, but I put the project on pause for first semester. The InVenture prize was the perfect opportunity to springboard what I had been working on," Buolamwini said.

While this year's competition has just drawn to a close, applications and letters of intent are already available for the 2010 InVenture Prize competition. Many of the winning team members had advice for future inventors and potential competitors in next year's competition.

"Being passionate is good… but keep in mind that the whole package is necessary. You can't be all about the technical side, but you can't market a product that's not going to work. You have to be mindful of the entire process," said Kento Masuyama, third-year AE.

"The InVenture prize is a great vehicle to get you further along the road to creation of a business or invention, but it's not the end in itself…it teaches you a lot. The business plan might take flight and you could really impact people with your invention," said Andrew Punnoose, third-year AE.

Photo courtesy of Will Boyd

The inventors of the Chlorocyte Bioreactor, winners of the team competition, will use the prize money to form a business.

sliver

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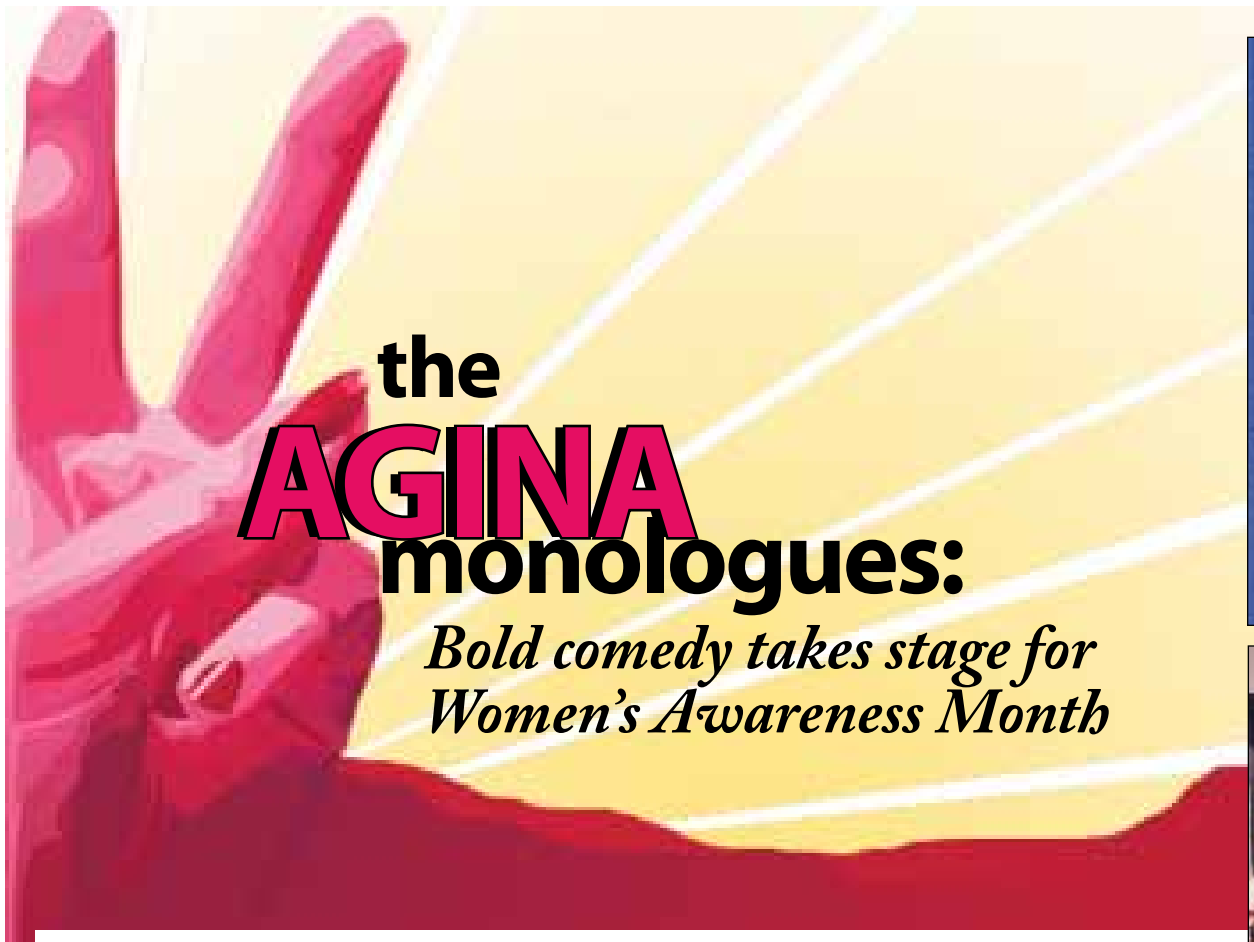
i hate the sports editor
ask not what the students can do for the school but what the school can do for the students
KVM, give up..... your class always has the lowest test average. Just admit that the only thing you can do is look pretty
Hey girl in my ECE3741 class. I just wanted to tell you that you are not the 5'2 equivalent of Angelina Jolie. If you think I am drooling over you, I am not. Get over yourself.
i hate girls that wear those stupid hollywood shades that take up 70% of their face. That makes me just ignore them. Like, yeah..... stay in your little mini hollywood world all by your damn self
what in the name of johnny johnson is the deal with these striped fleeces everyone is wearing? Geez talk about the clothing equivalent of soma
Yea thats right stay in your little ignorant I-pod world all by your damn self.
Yea thats right, chew gum and talk on your Razor phone.....live in your little laguna beach world. What amazes me is that ugliest girls in this school take part in these practices.....as if any guy would waste his life by trying to talk to them
RAZOR(sic)? please.



the AGINA monologues:

Bold comedy takes stage for Women's Awareness Month

Photos Ben Keyserling/*Student Publications*

The cast of *The Vagina Monologues* discussed aspects of female sexuality throughout the program.

By Chris Russell
Staff Writer

The vagina. It's a topic most people don't feel entirely comfortable discussing in public, yet this past weekend, a group of Tech women did just that and more with their performance of Eve Ensler's *The Vagina Monologues*.

The Vagina Monologues is a play that discusses several different aspects of female physiology and sexuality and society's view of both.

The play revolves around a series of monologues which, themselves are based on interviews with hundreds of different women across the world.

Anyone with any doubt about how frank the play would be was set straight almost immediately at the start of the performance, as the play started with a discussion of the word "vagina" itself, and a list of dozens of euphemisms for it.

The remaining few still harboring doubts about the play's nature were irrevocably informed of it by the first monologue, simply entitled "Hair."

The monologues are about every topic imaginable, from the everyday (like a teenager's first period), to the tragic (like the experiences of rape victims in Bosnia), to the thought-provoking (like an older woman's look back on her first experience with sex), to the hysterical (like a female sex-worker doing five minutes of impressions of different moans she had heard her clients make over the years).

Not all of the monologues were quite this graphic, however. One in particular, entitled "Hey Miss Pat", told the story of a woman struggling to support herself and her community immediately after Hurricane Katrina.

Jane Wong a fourth-year EIA major and the Monologues's student producer at Tech said, "The content of the play itself contains many different messages. It tells

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Know of something (or somebody) interesting on campus?

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the stories of many, many different women. So, not every woman and girl will feel a 'connection' to every single monologue, but the beauty of *The Vagina Monologues* is that it tells many different stories."

While some monologues were longer and followed an individual through an entire ordeal or story thread, other sections were much shorter and often took the form of a little-known fact.

Like the longer story arcs, these ranged from the odd (such as the fact that it is illegal to sell a vibrator in the state of Georgia), to the disturbing (like statistics on the number of young girls every year that undergo some form of genital mutilation).

Despite the serious nature of several of the monologues, there was a light-hearted air about the whole event. The decorations in the theater matched the subject at the center of the monologues, with pink visible everywhere and a cloth representation of a vagina adorning the back wall of the stage. For those looking for a light snack, chocolate vaginas were for sale at the front door.

This year, the *Monologue's* beneficiary was Tapestri, an organization dedicated to protecting and providing resources for battered and abused women in immigrant and refugee communities in the metro-Atlanta area.

Proceeds from the event and went to aid Tapestri in its efforts. Booths with information on Tapestri and similar organizations were set up outside the theater for interested students to learn more.

The Vagina Monologues are just part of a larger campaign, V-Day, that fights to end violence against women around the world.

V-Day was founded in 1998 by Eve Ensler, the author of *The Vagina Monologues*.

According to V-Day's official website, "V-Day is a global movement to stop violence against women and girls. V-Day is a catalyst that promotes creative events to increase awareness, raise money and revitalize the spirit of existing anti-violence organizations. V-Day generates broader attention for the fight to stop violence against women and girls, including rape, battery, incest, female genital mutilation (FGM) and sexual slavery."

Every year, V-Day focuses on the plight of a different group of women, chosen by Ensler. This year, the organization's focus is on helping the women of the war-torn Democratic Republic of Congo (DRC), a region where, thanks to a lack of government resources and the lack of stability in the region, rape victims have little chance of seeing their attackers brought to justice, and often remain silent out of fear of the repercussions of asking for help.

A new monologue, focusing on the people V-Day is working to help in a specific year, is added every year, and this year's was about an encounter Eve Ensler had with a young rape victim from the DRC.

According to Wong, as of this year, Tech's presentation of *The Vagina Monologues* will be a semi-annual event, with the next performance taking place in the fall of 2011. Applications are now being accepted for positions on next year's committee.

ThinkBig@Tech provides options

By Kalpi Desai
Contributing Writer

ThinkBig@Tech is a new program starting next fall that presents six different housing opportunities to students which enable them to explore academic interests.

The six learning options each focus around a particular theme and are led by faculty advisors. They permit students to surround themselves with other colleagues that have similar interests and also allow them to interact with a faculty member in a fun atmosphere in order to facilitate deep thinking and discussion. In addition, the program is designed to improve academic performance and increase student retention rates.

The ThinkBig@Tech communities will include approximately twenty to fifty members each. An advisor will encourage students to think deeply by visiting residence halls once a week and presenting an activity or discussion. In addition, the residents will form an Advisory Board that will assist the advisor in forming discussion topics.

The six options include: Technology and Urban Outdoor Adventures, LEGO Robotics and Outreach Community, Human Alteration: How far is too far?, Humor and Innovation, International House, and Women, Science and Technology.

Photo by Ben Keyserling/ *Student Publications*

Dan Morrison, director of residence life, introduces SGA Representatives to the ThinkBig@Tech living-learning communities.

Technology and Urban Outdoor Adventures will be led by Robert Burtura, ECE associate professor to further understand how modern technology affects the environment, society and humanity. Activities will include hikes along the Chattahoochee River, on-campus geocaching and discussions involving how modern technology enables people to manipulate or predict occurrences in nature.

Members in this community will focus on three major themes: biological/environmental technologies, neurotechnology and electrical/computer technology.

Each theme will be analyzed through different points of views such as personal or regulatory. This community will be held in Center Street South on the third floor.

The LEGO Robotics and Outreach Community is about building robotics using LEGO Mindstorm. Under the guidance of Jeff Davis, ECE associate professor, students will have a chance to learn how to program and design autonomous robots. In addition, members in this community will be presented with an opportunity to tutor middle school students in robotics. The community will be located in North Avenue South on the third floor.

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In order to address intellectual, social and ethical questions about the combination of human and machine, "Human Alteration: How far is too far?" is a community that will hold monthly movie nights to review science fiction. Movies including *Frankenstein*, *The Terminator*, and *The Matrix* will be shown and discussed.

Other exercises include reading books and visiting off campus sites such as the Shepherd Center to explore the integration of human and machine.

Furthermore, a Community outreach project will be developed. Led by Steve Deweerth, BME professor, this community encourages thought provoking discussions while maintaining a fun and interesting atmosphere.

Members of Humor and Innovation experience the thrill of laughter by learning about different types of humor such as stand up comedy, improvisational comedy and cartoons.

The role of humor in journalism and in technical matters as can be seen in *The Colbert Report* and *Myth Busters* respectively will be emphasized. The advisor for this community is Pete Ludovice, CHBE associate professor, and the community will be located in Woodruff South on the fourth floor. The purpose of this community is not only to enjoy a couple of good laughs, but also to learn how to communicate and innovate.

International House at Hayes House and Fourth Street will connect US students with international students to provide means of cultural diffusion.

With Kirk Bowman, INTA associate professor, as the advisor, the intention of this community is to discuss global issues and interact with students of different cultures.

Activities will include watching foreign movies and eating different ethnic foods. With a myriad of different cultures present, this vibrant community will work with other cultural groups on campus to help spread awareness and converse about international news.

One last community is Women, Science and Technology, led by Carol Colatrella. Specifically designed for independent women looking for a chance to address personal and professional issues women face in male dominated fields, the community offers chances to have dinner with speakers and informationals to help women stand out.

In addition, this community provides a way for women to bond and to think about ways to help women progress in the future.

ThinkBig@Tech is sponsored by Georgia Tech Undergraduate Studies and the Department of Housing-Residence Life. These communities will be held both Fall and Spring semesters.

The cost is $150 each semester to support the activities and food.

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Wright, a second-year CE major, felt that Earth Hour was good idea for Tech students since "we are poor and are trying to save money" but instead of for just one hour "it should be done for a whole day".

Stallings Blakeley, a second-year INTA major, also enjoyed the event but was "mad that they did not turn off all of the lights", commenting on the apparent presence of electricity throughout the party.

Photo by Ben Keyserling/*Student Publications*

Despite the rain, students celebrate after Earth Hour in the Student Center with live music, socializing and free food.