IE senior design group explores redesign of the Stinger route

By Jennifer Lee
Staff Writer

While most of the other groups in their senior design class were working with companies outside of Tech such as Boeing and UPS, industrial engineering students Alanna Millman, Bryan Karlan, Megan Kirk, Jessica Kirk and India Haddock chose something a little closer to home—improve the Stinger route.

"They did say that our working on this project now is very good timing," Megan Kirk added. "With Technology Square about to open up, they need new plans."

The students brainstormed with Ware to gather information and see what aspect of the Stinger route they would focus on. In the end, "We came up with the fact that the night route is hardly used and the Stingerette is mostly overburdened," said Millman.

As a result, the group decided to concentrate on the Stinger operations from 6 p.m. onward. So far, the group has conducted research—the old fashioned way. "We rode the bus for two weeks, from 6 to 9:30 p.m.," said Karlan. "During allotted amounts of time, on different days of the week, there would always be one of us on a red bus and one of us on a blue bus. It was incredibly boring."

"Our goal is to infiltrate the inside of campus so [the stinger] hits the main spots like the library area," said Kirk. Fourth year IE major

The group also passed out surveys, and gathered results from more than 400 students. One conclusion the group reached after conducting the surveys was that many students are not knowledgeable about the Stinger night route schedule. "It’s definitely underutilized," said Millman, who explained that the buses actually do run much pretty much on time: the blue route leaves Fitten on the hour, and then 20 minutes after, and 40 minutes after; then the red route leaves at 10, 30, and 50 minutes after the hour.

"We asked students if they knew the night stinger route, and, 97 percent said no," said Megan Kirk. "But another question asked, would you use the night stinger route? And a lot of people said yes."

One goal is to infiltrate the inside of campus so it hits the main spots like the library area," said Megan Kirk.

Karlan added, "A lot of people have night classes over at the CoC, the physics building, Skiles, Van Leer... and we want to hit those, especially, because a perimeter route is not doing any good when people still have to get to work from North Avenue to get to the library."

Working with the Department

Profile of Saniya Ahsan

Churchill scholarship winner talks about her success, excitement

By Kimberly Bielch
Staff Writer

Hard work, dedication to her field and community and campus service helped Saniya Ahsan become the first female student at Georgia Tech to win the prestigious Churchill Scholarship. Ahsan, a mechanical engineering senior with a French minor, is one of only 11 American Churchill scholars this year.

The scholars are chosen to study engineering, science or mathematics for a year at Cambridge University in England; the scholarship covers the complete cost of attendance and living expenses.

The Winston Churchill Foundation of the United States was founded as an expression for the United States’ admiration of Winston Churchill. The foundation encourages the exchange of knowledge between the United States and Great Britain.

"Churchill scholars are chosen on the basis of their high academic achievement, capacity for original, creative work, character, adaptability, demonstrated leadership and concern for critical problems of society," said Amanda Gable, Tech’s advisor for the Marshall, Gates, Cambridge and Churchill scholarships.

The honor is one of many that Ahsan has received in her academic career. After moving to Georgia from Kansas as a teenager, Ahsan became valedictorian of North Cobb High School in Kennesaw and received the Governor’s Scholarship.

The choice to come to Tech on a President’s Scholarship was an easy one for Ahsan. Not only was Tech affordable as an in-state school, but it also offered a strong mechanical engineering program for Ahsan. "I have always wanted to be a mechanical engineer since I was ten years old. Mechanical engineering is about moving parts and understanding how everything works, and that’s just cool to me, because it satisfies my curiosity," said Ahsan. "I know that when I look at something and think ‘how does it work?’ that I can find the answer," said Ahsan.

To her surprise, Ahsan found that as long as she worked hard and understood the material, Tech classes would not be as difficult for her as she had anticipated. After her freshmen year, she applied for the Fleet study abroad scholarship from the Alumni Association. Though she had perfect grades, Ahsan knew her youth would be a handicap for the award. "They could feel that I wasn’t mature enough because I had just started college," she said. "I told them that I’m just starting out and what makes me stand out from the other applicants is that I’m going to grow and I know I’m just going to be different. I think they saw that potential. That was a real honor for me because I was just starting out my college career," said Ahsan.

Ahsan used the scholarship to study at GT Lorraine when GT Lorraine’s study abroad program was in its infancy.

It was the first of many study abroad experiences for Ahsan. After completing three co-op terms with Visteon in Pennsylvania, Ahsan returned to France to intern at Schumberger in Clamart.

Two particularly impressed with Saniya’s pursuit of an eight month international internship in France which gave her a challenging engineering experience and an opportunity to further her French studies," said Gable.

Excelling in the classroom, she has maintained a 3.97 GPA. In her entire academic career, Ahsan has only made one ‘B’—in Strengths and Materials, an ME class. Her choice to specialize in thermal science has led to her research in the field of Micro-Electro-Mechanical Systems (MEMS) in Tech’s Manufacturing Research Center. Appli
Women’s role at Tech characterized by leadership, involvement

By Joshua Cuneo
Staff Writer

Almost immediately following Diane Michel’s and Elizabeth Hemdon’s arrival at Tech in 1952, women began asserting their presence on campus through extracurricular involvement and the acquisition of leadership roles. Eleven women established the first sorority on campus in 1953, just one year after they were admitted to the Institute. Ann Brown became the first female cheerleader that fall, and the following fall, the first two women were admitted to the ROTC as cadets attached to the air force unit. A local chapter of the Society of Women Engineers was established in the spring of 1956, and in 1957, Gamma Phi, the YMCA women’s organization, was established. Also in that year, Paula Stevenson became the first woman elected to the Ramblin’ Reck Club.

By the 1970s, the number of organizations open to women multiplied along with the number of women admitted. In 1974, the Student Center Activities Committee formally refused to charter activities that discriminated against women, and most notably, in 1978, Amy Weplking made a tremendous leap forward for the female student body by becoming the first woman elected student body president. By the 1990s, women were assembling their own organizations, such as Dr. Karen Walker’s creation of the Georgia Tech Flag Corps and the initiation of the North Avenue Review.

Today, Georgia Tech women are actively involved in almost every society to which Tech has to offer, serving in a variety of positions of responsibility. This is an indication of their acceptance and integration into the Georgia Tech community, and it also reflects the increased diversity that women have brought to campus through their varying leadership abilities and philosophical ideals.

Alice Gung, for instance, is a fourth year industrial engineering major who believes she can make a bigger difference by focusing most of her attention on one major activity. She currently serves as the General Manager of WREK radio station.

When the position was going to be opened, I decided to run for it, she said. I wanted to get more involved on campus…[but] I wanted to pick one organization I could really be involved with rather than just a few that I was sort of involved with.

Having moved up through the ranks from Disc Jockey to Studio Director, her experiences with the

Vickie Cherry, Mandy Lowry and Alice Gung are all involved in campus activities at Tech. Cherry is a second year INTA major, Lowry is a fourth year CS major and Gung is a fourth year IE major.

She wasted no time when she entered Tech; she ran for president of her Hall Council in her first semester. This led to her involvement with RHA and later the SGA, where she served as Secretary until her junior year.

But her most passionate activity has been the Chinese Student Association, where she’s currently serving as President. “…I was fascinated at the fact that there existed a cultural organization…to promote the Chinese community and our

leadership role.

She described the experience of serving in a variety of positions of leadership, involvement and the acquisition of responsibility. This is an indication of their acceptance and integration into the Georgia Tech community, and it also reflects the increased diversity that women have brought to campus through their varying leadership abilities and philosophical ideals.

Alice Gung, for instance, is a fourth year industrial engineering major with a particular fondness to not only work with large organizations and lead their members, but to be in a lot of them. “I found that to get involved as much as possible…I could really get something out of my college experience,” Gung said.

I guess if I could, I would take part in every organization here at Tech…The more you do and experience in life, the more you learn from it.”

She explained.

Cherry exhibited a proactive attitude from the beginning. Not arriving at Tech until early last year, she was disadvantaged by a shortened spring FASET with no activities fair, so she found herself actively researching the organizations open to her and choosing those whose structure, attitude, and goals impressed her. She settled on FASET. “…I felt like I could make the most impact through [it],” she said.

She gained enough experience in group management that summer to prepare her for her entrance into the SGA that fall, a move that she said has become one of the most passionate of her extracurricular career. Having joined several committees and served as freshman class president, she was excited with the Association’s heavy involvement in campus affairs. She became Campus Service Chair, for instance, be

See Women, page 13
Churchill
from page 11 of her research include more fuel-efficient cars and power plants. In addition, Ahsan also made the time to be a teaching assistant for fluid mechanics.

Despite her rigorous academic curriculum, Ahsan has made time for numerous extracurricular activities. Ahsan has been heavily involved in the Woodruff School of Mechanical Engineering Student Advisory Committee. She has served as co-chair, vice-chair and newsletter editor for the committee. Ahsan worked as a literacy volunteer tutor for two years and as an English-as-a-second language volunteer teacher in the Atlanta community.

Additionally, she has contributed to the Women in Engineering program and the M&M mentoring program. She served as a team leader for the mechanical engineering Psych 1000 class. As an M&M mentor, she gives advice and support to freshman and sophomores entering the field of mechanical engineering.

One of her mentors is Hillary Davis, a freshman NRE major. “When I first met her, I was surprised that she was so down to earth. I never expected her to be like that because of what I know about her academic achievements,” said Davis. Davis said Ahsan is a great role model for her. “She’s incredibly determined and knows exactly what she wants,” said Davis.

Ironically, Ahsan did not think she could qualify for the Churchill Scholarship and other prestigious scholarships, such as the Gates and the Marshall scholarships. “I always thought those got to the really smart people, you have to be awesome, do sports, know literature and be able to cure cancer, that type of thing,” said Ahsan.

Her rationale caused her not to look into the scholarships until her junior year. However, Gable encouraged Ahsan to apply for the scholarships. “Sanjia’s superior academics certainly made her competitive for scholarships such as the Churchill, but the depth of her campus and community involvement and the focus she gave to her various interests, such as teaching and research, also were factors,” said Gable.

Ahsan decided to sit down and figure out where she wanted to go the year after she was applying to graduate school. Gable and other Georgia Tech faculty helped Ahsan prepare for the process.

A disappointment for Ahsan came when she found out she did not get an interview for the Marshall Scholarship. However, it made Ahsan go back through her applications for the Churchill, Gates and Cambridge scholarships and make them stronger than before.

At the end of December, Ahsan found out she had received the Churchill Scholarship.

“I received a phone call from one of the trustees. I was actually hunting around the house for some cheerios because I really wanted cheerios and I couldn’t find my cheerios. I sat there and we had a half an hour conversation over the phone, and at the end of the conversation he offered me the scholarship,” said Ahsan.

She immediately accepted the scholarship and withdrew from the Gates and Cambridge competitions, for which she had been selected as a finalist.

After graduating with a B.S.E. in ME and a minor in French in May, Ahsan will head to Cambridge to pursue a Masters of Philosophy in Engineering. Ahsan will continue her search in MEMS there, as well.

Stinger
from page 11 of Parking and Transportation has allowed the students to gain some insight into future plans for Tech. For example, there are plans to close some roads to thru traffic, including Tech Parkway, Cherry Street and Atlantic Street. While these plans are still in the future, the group is simulating some closings, such as Cherry Street, into consideration in their research.

Road closings are not the only constraint the group has to work with. Another is the number of buses. After 6 p.m., the number of Stinger shuttles running is reduced from three buses on each route to one, for a total of two buses.

“Also, we have a third bus available in the fall because a route has to address Technol- ogy Square,” said Millman. “One idea is [for the third bus] to be a shuttle to and from Technology Square; one idea is to incorporate it and have three different loops going on around campus.”

“We’ve got a lot of freedom with that,” said Karlan. “We just have to sit down and figure out…what’s going to benefit the students. For example, we found out in our survey that people would only be willing to transfer once.”

“They really want to get people out there,” said Millman. “So that’s part of the reason we’re making sure this shuttle or loop to Technology Square works.”

Currently, the group is working on organizing their survey data and the data collected from riding on the Stinger. Then they plan to create several route alternatives, design simulations using a computer program, and use those to weigh the benefits of each new route design. The simulation is key to their project; it allows them to do calculations with their data, and also, “It’s stop-for-stop, for someone to see a visual aid with a bus circling around with a count number, and count number of people that have missed the bus,” said Millman.

“I definitely think our core final product is the new routes, as well as our proof and recommendations, as far as that goes,” said Millman. “But we also wanted to include a lot of other stuff, including implementation plans—a lot of that is because we’re students also.”

For example, the group has thought about improving the Stinger stop signs. “We’re looking to put up more information in general,” said Millman. “We’re looking to put up more information in general, both on the signs that will mark the stops and on the interior of the bus, displaying which route is, where it stops, expected arrival times, maximum wait times,” said Jessica Kirk, “because as it is now, the signs are pretty bland.”

Despite the broad scope of the improvements the group is suggesting, they hope to incorporate all these things into their final presentation. “It’s a lot of work for one semester,” said Millman.

Their efforts will culminate in a presentation to the management of the Department of Parking and Transportation, and may also include some representatives from the administration as well.

“It’s kind of cool,” said Karlan. But more importantly, the group can feel like they are really making a difference with their project.

“All the random people on the stinger who were like, ‘what are you doing’ get excited when we explained our project,” added Millman. “So that’s very cool.”

Women
from page 12
cause “I was very excited about a committee that had such a diverse range of services, and I knew that the things I had accomplished in that committee would directly impact student’s lives.”

Involvement such as this has helped earn the female-student body an enormous level of respect. All three women were asked if being a woman has had a negative impact on their positions as leaders and in- volved students, and each gave the same reply. “It didn’t,” said Cherry simply. “I think the guys notice the ratio more than the girls.” Lowry never felt any influence, either. “I think that if you’re responsible and you do your job, then they’re going to respect you, and [gender] doesn’t really make a difference,” she said.

Gung, however, felt that it was actually beneficial, because “women are passionate and emotional in the things they do,” a quality she felt has worked to her advantage.

One of the biggest challenges that have confronted all students such as Cherry, Lowry, and Gung throughout history has been finding the balance between studying and carrying out their responsibilities in their organizations.

“This past year, I was unsure as to what I wanted to participate in, so I joined a wide range of activi- ties,” said Cherry. “So I was working several at once, trying to keep my workload… [but] I was spreading myself too thin, and now that I know what I am passionate about.”

Gung uses the social connections that her participation in campus life has offered her. “When times are rigorous and the workload seems overwhelming, I rely on good friends to help me out,” she said. “It’s a good mix of time management, job allocation to others you work with, and knowing your limitations that keeps your days productive and enjoyable at the same time.”

Focus on Student Life
Tech Up Close

email: focus@technique.gatech.edu

Winner of the Tech Up Close contest receives a Technique T-shirt and a coupon for a free student combo at Li’l Dino’s.

Last week’s Tech Up Close:
Lightning alert system on SAC fields.

Last week’s winner:
Daniel Delman