

## 'Heist' sneaks onto the screen

The *Heist*, opening this Friday, stars Gene Hackman as a retired professional thief forced into one last heist by Danny DeVito. Read the review in Entertainment. Page 19

## Smelling the sweat

For the first time in history, Tech students will be courtside when the basketball season begins. How can students get these prime seats? Find out in Sports. Page 32



# Students design their own vision of campus

*Students in the College of Architecture were given an opportunity to design the portion of Tech's campus that will eventually move across 75/85. Three individual projects concentrated on infrastructure, housing and public space.*

By Gray Gunter  
Assistant Focus Editor

Finally, Georgia Tech students were given an opportunity to bring to life a vision of campus of their own making. Over a series of display boards, virtual-video walkthroughs and floor maps, teams of architecture students crafted a series of projects for renewing the areas around the 75/85 connector and bridging the space above the highway. Simply put, the problem students faced was to reunite a divided city. In Atlanta's case, the fault line is a stretch of Interstate 75/85 that cuts a deep ravine through midtown. This creates both a physical barrier between the two sides of the city as well as a mental barrier to how people view the city.

West of the interstate, on the Georgia Tech side, is a heavily industrialized area that suffers from abandonment and severe decline and a seriously ailing retail industry. To the east, towards Peachtree Street, office towers and luxury condos are the norm. The actual distance separating these areas is small, but the obstacles between Tech and Midtown, both pedestrian and automobile, are considerable.

With this in mind, students at the College of Architecture set out to repair the damage created by decades of building and abuse. The projects as-

sembled in the lobby are not part of an official master plan agreed on by the students participating in the assignment, but rather a collection of independent visions that could be taken or rearranged in any variety.

The project had three focal points: infrastructure, housing and public spaces—three crucial elements of city life. A separate studio was assigned to each of the three aspects of the project and they concentrated their efforts on envisioning, designing and presenting their ideas.

Professor Richard Dagenhart's studio was responsible for infrastructure. This meant that rather than using land and building structures for specific purposes, students would handle the creation of a permanent framework to unite the areas surrounding the downtown connector. In addition to adding to the Midtown infrastructure, the class discussed revamping existing structures. For example, students of this group proposed a redevelopment of the Third Street tunnel on East Campus.

Currently the tunnel is an underused, poorly maintained corridor at the end of Bobby Dodd. Except during football games, pedestrians infrequently visit the tunnel. Normally the route is avoided altogether because it is viewed, and rightfully so, as unsafe. The tunnel is viewed so negatively in fact that students avoid the tunnel despite the fact

that it provides the shortest walk to Marta, parking and the rest of the city east of 75/85.

Glendali Rodriguez saw the Third Street tunnel not as a failure of the structure itself, but as a lack of worthy destinations on either side of the interstate. As Rodriguez said in the board devoted to the Third Street redesign, "The only difference between the Calahan Tunnel in Boston and one in the Swiss Alps is not the tunnels themselves, but what's on the other side." With this in mind Rodriguez presented a view of the Third Street Promenade in place of the old Third Street Tunnel. Whereas the tunnel connects a parking lot to a road, the Promenade design aimed to create a walkway with an immediate payoff to pedestrians moving in either direction. On the Tech side of the interstate a small park would be created in the space already existing in and around East Campus dorms. Balancing this natural attraction on the east side of the interstate would be shops, clubs and restaurants serving both the city and Georgia Tech.

Again and again the project returned to the metaphor of the city as a cloth that has been torn through its center by massive highway projects. The overpass projects are stitches meant to reweave the urban landscape into a unified

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By Daniel Uhlig / STUDENT PUBLICATIONS

Architecture students design three aspects of the Master Plan. View their designs in the atrium of the new Architecture building.

## Students cope with post 9-11 aftershock

By Madhu Adiga  
Contributing Writer

Nearly two months after the terrorist attacks in New York and Washington, faith continues to play a major part in students' lives. Since many are quick to label the attacks as an act of Muslim fundamentalism, religion is a key topic of discussion. The issue runs deeper in the Georgia Tech community, however.

Tech students who practice any sort of religion are generally finding it to be a source of refuge in these times of crisis. "I've noticed most students calling on their faith to give them strength, just as they would in any time of hardship," said Bobby Evans, a campus minister for the Georgia Tech Baptist Student Union (BSU). On September 11, BSU called a special time of prayer and scripture reading and gave students an opportunity to submit their own prayers.

At Christian Campus Fellowship (CCF), numbers surged during the first week or two after the attacks. "Although a lot of the new people stopped showing up after the first week or two, there are definitely some people who have taken their faith more seriously as a result of what happened," said Neal Baker, an assistant minister at CCF.

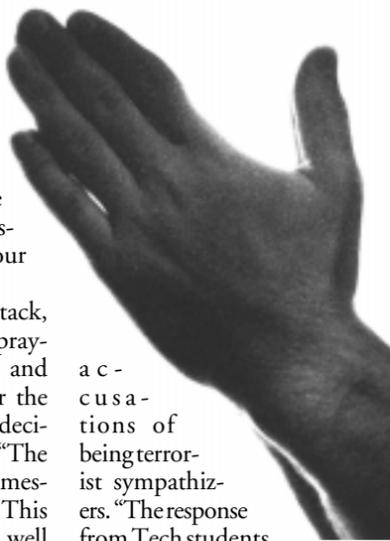
According to Evans, most ministers like himself are encouraging their congregations to deal

with the terrorist attacks through personal prayer, rather than giving them any specific suggestions or instructions on how to handle it. They do stress certain parts of scripture on occasion, however. "In a small Bible study group we had recently, we focused on passages that dealt with loving your enemy," said Evans.

On the evening of the attack, CCF held a prayer meeting, praying not only for the victims and their loved ones, but also for the government leaders and the decisions they would have to make. "The one thing we are stressing is a message of love towards everyone. This includes loving the enemy, as well as showing love and understanding to those following the Muslim faith," said Baker.

"Not all people of faith are going to react to the attacks the same way, but I have seen many become stronger in their religious beliefs," said Sanin Rahman, President of the Bangladesh Student Association. "On the same token, however, I have also seen people give up on their religion completely. It is hard for many to believe that there is still even a God if He would allow something horrible like this to happen that cost so many innocent lives."

Of all religious faiths, Islam seems to be the hardest hit. With the attacks linked to the Taliban government in Afghanistan, followers of the Muslim faith have become targets of taunts, discrimination and



accusations of being terrorist sympathizers. "The response from Tech students has been positive overall, but we [the Bangladesh Student Association] did have a general meeting after the attack warning our members to be careful," said Rahman. "We advised the Muslims in our organization not to attend the mosque on 14th Street for a couple of weeks until things calmed down."

Although some Muslim religious leaders have given their congregations similar warnings, many have also encouraged the congregation to remain strong in their faith and expressed their condolences to those whose loved ones were affected by the attack. Different congregations are dealing with the issue in different

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## Get yourself hooked-up

By Benjamin Small  
Columnist

Over the last semester, I've talked about sundry research projects that are taking place on campus. I'm sure you were captivated by the topics and the style in which they were written. But what if I happened not to have covered a subject in which you're interested? Well, lucky for you, this week's topic is how to get yourself hooked-up with the research project of your choice. (It could very well be the most gratifying hook-up of your adolescent life.)

Step one: look around. Nearly every group on campus has some web presence. All of the Schools' websites contain sections on the research being conducted by their faculty. Moreover, GTRI and interdisciplinary research centers like the Microelectronics Research Center (MiRC) have their own websites that outline the projects they support. Look around; everything's normally organized by specialization.

Maybe you've even had a class with a professor who concentrates on a field you like. Professors' websites normally mention their professional interests.

As a last resort, you can even use one of the Library's publication databases (like INSPEC or the Web of Science from ISI) to search for publications concerning your topic of interest and containing "Georgia Tech" in the address; then see who the first or last author is. (Traditionally, the group leader or principal investigator is listed last for works

written by students.)

So find who heads the research effort in which you're interested. Then, step two: contact that person. Email is of course the default and ubiquitous form of communication nowadays, especially in academia.

Most professors, especially the cool ones, receive hundreds of email messages daily. (Wowzers!) So you have to make yours stand out to get noticed. AnD tHiS iS nOt ThE wAy tO Do iT (dude doesn't care how l33t you are). Content—you should get his or her attention from the content of your inquiry. Sound educated (hopefully this won't be a charade); become familiar with some of the group's publications. You want to demonstrate that you would be an improvement (at least a small one) to the research efforts and that it's worthwhile to invest resources in training you or introducing you to the lab.

(Some professors, unfortunately, don't respond so well to email. These black sheep may have to be approached in meatspace during office hours or after class or even at a seminar they've hosted.)

Chances are, if you've done well so far, you'll be invited to talk with the researcher. (You should probably allude to this in your introductory email message.) Step three, then, is closing the deal. Most professors are smart cookies; they won't so much be impressed by a three-piece suit as they will by good questions and your comfort with discussing

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entity. Such efforts are not uncommon anymore. Boston's monumental construction, the 'Big Dig', and Seattle's Freeway Parks, are prime examples of American cities working to take their interstates out of sight and bring every day life back into focus.

The issue of public space is important to Tech because it directly addresses the issue of how the Institute relates to the city and becomes part of the community. During the 1970s and 1980s the trend in urban college design was to protect the campus from the dangers of an encroaching city. Safety concerns are particularly evident in Atlanta where, for example, Georgia State's academic buildings are connected by raised walkways and Tech's campus is surrounded by a brick wall.

Recently, schools have integrated part of the city and the neighborhoods surrounding them into the college community. With this in mind, Professor Harris Dimitropou-

los' studio explored the ways in which public space, running over and parallel to the interstate, could connect Tech back to Midtown Atlanta. Students focused on the natural attraction of green space including mini-parks and tree-lined walkways.

The more adventurous plans for the space above and across 75/85 included a soccer stadium, a series of basketball and tennis courts and a multilevel, multi-use building that spanned the entire highway. This concept, dubbed by student Steven Brown, "The Big Box Bridge," is a structure housing a convenience-grocery store, a student athletic annex and a video rental store, with a parking lot on top. Brown describes the design as much more than just a building, "The Big Box becomes a street- a seamless connection between Georgia Tech and Midtown-active, diverse, interesting, and a great walk to the new Georgia Tech east campus."

The "Big Box" concept is notable because it contained within it three hot ideas in urban renewal. First, structures that crossed major

highways and focused on pedestrians. Second, designs that link universities with the city that surrounded them. And finally, the return of mix-use buildings that reduce sprawl and traffic by bringing multiple needs of the public under one roof.

The final focus of the project, the task of bringing housing to the overpass, was given to Professor Athanassios Economou's studio. Housing projects from this studio were concentrated between Tenth and Fifth Street to create an area of medium-rise residences for both students and the general public.

The boldest housing proposal from the class was Chris Henshaw's Fourth Street Housing Bridge. The project is rooted in Henshaw's view of what defines a 'campus'. As he said in the project, "Expanding the campus east across the highway makes sense- it connects Georgia Tech to Midtown and it builds around—not away from—the historic core of the campus. But the Fifth Street campus is just a half-campus. No student housing equals no real campus." The project would create a



By Brian Oxford / STUDENT PUBLICATIONS

**Many of the designs were radical solutions to space allocation and infrastructure problems such as using buildings to bridge open space.**

student dorm crossing over 75/85. The structure would serve as both a residence to students and a path to the new East Campus projects.

The 'Re-Connector' or 'New Ground' project isn't a complete scheme for bringing Midtown and Tech together. It certainly isn't a blueprint that the administration will be forced to follow. The project

is simply a series of good ideas developed and designed to their fullest potential, ideas not founded by faculty or city planners, but by the students who experience the ramifications of the planning decisions normally made by outsiders. And who better to mold the vision of the future of Georgia Tech than the members of the Institute.

# Tech student makes TopCoder semifinals

By Sriram Narasimhan  
Contributing Writer



Perhaps what the computer programmer needed most, excluding, of course, more processing power, was a company with a simple and sound mission statement demonstrating its desire to reverse the traditional stereotypes encapsulating the profession.

That desire for social change became a reality in 2000, when a man named Jack Hughes founded TopCoder, a Connecticut-based company that regularly runs tournaments that bring the most skilled computer programmers in the country together. Contestants compete against one another to solve a variety of tasks in either the Java or C++ programming language.

This past Friday and Saturday, TopCoder hosted the first-ever \$250,000 TopCoder Invitational Computer Programming Tournament in Foxwoods Resort Casino in Mashantucket, CT. It was just one of numerous rounds of tournaments in which members of the always expanding company compete. However, what makes this particular competition especially significant is that one of the finalists in the competition, Trayton Otto, is a student at Georgia Tech.

"TopCoder gave me an avenue to tackle problems that I could not tackle in a classroom. It's brought my programming to a whole new level," Trayton Otto, a second year Computer Science major, said. "I've learned rapidly as a result of classes and TopCoder combined...I'd recommend it to anyone who's in-



Photo provided by TopCoder

## Trayton Otto, a Tech Computer Science major, competes in the semifinal round at the TopCoder Invitational Programming Tournament

terested in programming to expand their abilities."

Otto was one of 15 finalists in the competition that not only included students from other prestigious colleges in the country, but also professional computer programmers.

Otto's task in the finalist round was divided into three computer problems of increasing difficulty which he chose to solve using Java. The first asked Otto to calculate the least number of moves that could be taken to move a red checker piece from one side of a checkerboard to the other, while still moving past the black pieces. The second program enabled a user to input a single, arbitrary string into the interface and receive as an output, a series of multiple strings. The final, as well as the most difficult, required the competitor to design a program that would perform the basic mathematics functions on inputs containing very large numerical values.

Although Trayton Otto was not the winner of the \$100,000 grand prize, he still won \$3,000 for making it to the semifinalist level. John McAlister from Stanford University, won the tournament.

"It was definitely a good group

who came to the contest. A lot of the programming skill came from their innate ability," said McAlister, whose computer program aimed to investigate some of the mathematical representations in residential telephone lines.

The starting point for Otto, McAlister, and every other programmer, is TopCoder's website, [www.topcoder.com](http://www.topcoder.com), which is not only the hub to forums where programmers such as Otto discuss solutions to various problems, but also where anyone interested can take a look at the company's mission statement and the rationale for its existence.

In addition, there are links directly on the website to documents concerning equal economic status compared to other professions in the United States. Long-term goals such as these were the impetus for the founding of the company.

"Programmers are looked at as a community as a whole, where it is difficult to differentiate between one and the next...it doesn't specify in terms of skills, as do the various professions in

See *TopCoder*, page 25

## Research

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### Word to the Wise

#### Research centers in and around campus

##### GEORGIA TECH RESEARCH INSTITUTE

GTRI offers many employment opportunities for students. Full work info can be found at [www.gtri.gatech.edu/work/index.html](http://www.gtri.gatech.edu/work/index.html)

##### ECONOMIC DEVELOPMENT INSTITUTE

EDI encompasses such research centers as the Industrial Assessment Center and the Center for International Standards and Quality.

##### COLLEGE OF SCIENCES

The CoS brings heavy scientific research to the Institute. More information on their research centers is available at [www.cos.gatech.edu/res.htm](http://www.cos.gatech.edu/res.htm)

##### COLLEGE OF COMPUTING

The CoC has dozens of ongoing research projects. Full info on the college's research is available at [www.cc.gatech.edu/research.html](http://www.cc.gatech.edu/research.html)

##### COLLEGE OF ENGINEERING

The CoE has many research centers, a full list of which is available at [www.coe.gatech.edu/research/all.html](http://www.coe.gatech.edu/research/all.html).

##### IVAN ALLEN COLLEGE

Georgia Tech's liberal arts college offers research opportunities as well, such as the Center for International Strategy, Technology and Policy.

##### COLLEGE OF ARCHITECTURE

CoA has research centers including the Advanced Wood Products Laboratory, and the Center for Rehabilitation Technology.

##### DUPREE COLLEGE OF MANAGEMENT

The DuPree college has such research opportunities as CIBER, the Georgia Tech Center for International Business and Research.

A full listing of research centers at Tech can be found at [www.gatech.edu/research/rgs4.htm](http://www.gatech.edu/research/rgs4.htm)

the field.

This is exactly what I did way back as a freshman: I emailed the director of the research center in which I was interested. And even though he's one of the busiest administrators on campus, he took the time to talk with me within the next couple of weeks. I came with my resume and convinced him that I would be an addition to the center. It was cake.

So don't be scared of professors. The reason the Institute exists is to serve students in their pursuit of education. They have a lot to gain from recruiting students—it's how they get their research done.

And Georgia Tech is one of the best-funded schools in the nation. Hundreds of millions of dollars are procured annually from government and private sources. And President Clough himself has indicated a desire to increase research among undergraduates.

In my case, I was fortunate enough to receive monetary recompense. Honestly, you probably shouldn't expect to get paid for your work; you get invaluable experience from

it anyway. But, heck, it sure is a nice perk.

Anyway, so now you've been accepted to the group, right? Of course, now you want to make sure you're a productive member and that you get good experience. In many fields, this is also a great time to get yourself published, especially if you're interested in pursuing graduate studies. Hopefully the professor can help you arrange this.

You can hopefully build up to eventually being able to submit to one of the better-respected journals in your field. But that can take a lot of work and experience. This gives me the perfect time to shamelessly plug a new student publication here at Tech that will publish student research articles: *The Journal of Student Research and Technology* ([jsrt@gatech.edu](mailto:jsrt@gatech.edu); [cyberbuzz.gatech.edu/jsrt](http://cyberbuzz.gatech.edu/jsrt)).

Doing research is good. It will help establish professional contacts that could prove extremely valuable in the future. And, oh yeah, you get to be involved with some really amazing advancement of knowledge.

# Tech Up Close

focus on an icon  
email: [focus@technique.gatech.edu](mailto:focus@technique.gatech.edu)

Last week's Tech Up Close:  
Student Center Stinger stop



By Andrew Saulters/ STUDENT PUBLICATIONS

Last week's Winner: Michael Castille