

## SPORTS STARS' SOFTER SIDE

P.J. Daniels, Jarrett Jack and Lynnette Moster talk about interacting with the Tech community as students, rather than as athletes. Page 30

## WINE AND WOMEN

In Alexander Payne's movie *Sideways*, a wine connoisseur tries to teach his about-to-be-married best friend about the finer things in life. Page 20



# ESPN's *I'd Do Anything* tests student's limits

By Jennifer Lee  
Focus Editor

We at the *Nique* can't seem to get enough of reality shows these days. Luckily, there's no shortage of Tech students who've had their taste of reality show fame.

David Horwath, a fourth-year Civil Engineering major, was recently a contestant on the new ESPN sports reality show *I'd Do Anything*. The show, hosted by George Gray (who has previously hosted shows like *Junkyard Wars* and *The Weakest Link*) features three contestants competing head-to-head in four sports-related challenges.

In the ultimate act of altruism, the winner gets nothing for him or herself—but he or she does enable a family member or friend to have their ultimate sports fantasy fulfilled. Horwath competed to win a chance for his younger sister Carolyn, a high school sophomore, to play with the U.S. women's Olympic soccer team. Horwath, who is on Tech's cheerleading squad, heard about the show over the summer from his coach.

He decided to fill out the application, writing about how he and his sister grew closer during the time when his father left. "I pretty much talked...about how mature she acted during that time...and how much it would mean to me to give her her dream."

"I looked up and... [saw] this huge sign: ESPN I'd Do Anything World Championship Ballroom Dancing."

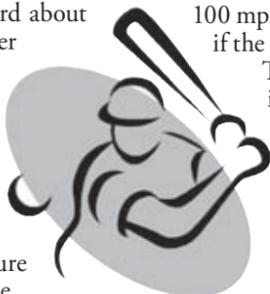
David Horwath  
Fourth-year CE major

On the first day of school, Horwath received a call saying he had been chosen. Horwath and his sister flew out to the West Coast on Wednesday, and the craziness soon began. "There wasn't a lot of downtime in between interviews and events," he said. "We went from sunup to sundown every day."

Horwath competed against two other men: Rich Bracken, a salesman from Iowa, and Rob Johnson, a manager from Ohio. The four challenges—which fell into the categories of "Pain," "Shame," or "Insane"—took place all over the country: the first two outside of L.A., the third in Las Vegas, and the fourth, all the way across the nation in Connecticut.

## CHALLENGE #1: PUT ME IN, COACH

For the first event, the three contestants had to face a pitching machine that shot baseballs up to 100 mph—definitely "Pain" if the balls hit you.



There were two rounds: in the first, they were hitters, and in the second, they donned catchers' mitts. Points were given for fair balls hit, and balls caught. "They were throwing them in the dirt, they were throwing them straight at you,

high, to the left, to the right," Horwath said.

Horwath didn't win that event: one of his contact lenses had broken that morning, and the crew didn't have enough time to get a replacement.

"I was trying to do all that with one eye...it added some challenges," he laughed.

## CHALLENGE #2: ICE, ICE BABY



The next challenge involved curling, the winter Olympic sport in which competitors try to push a stone weight over ice onto a bullseye.

The twist, however, was that Horwath and his competitors were the weights.

"Instead of using stones, we used our bodies," he said. "We'd have to run down this carpet, jump and slide across the ice." A stone was placed where the contestant's head ended up, and the next competitor tried to knock the stone out in order to get their head closer to the bulls eye.

The "Pain" part of the event came with the cold. Toward the end of the event, the carpet was taken off the ice, and a new coat of water was added to the sliding surface. After multiple rounds, all three



## CHALLENGE #3: "A GI-GANTIC BARNEY"

Next stop: Las Vegas. When he arrived, Horwath couldn't help but speculate about the challenge. "We pull into Las Vegas, you're thinking, boxing, maybe," said Horwath, who was a wrestler in high school.

Instead, they arrived at the Star-

dust Hotel to find out that they would be featured in a world championship exhibition for...ballroom dancing. "I looked up and [saw]...this huge sign on the Las Vegas strip: ESPN's *I'd Do Anything* World Championship Ballroom Dancing—David, Rich and Rob," he said.

The three were given an hour with an instructor to learn how to dance the tango and salsa. "Anybody that knows me knows I can't dance," Horwath said.

In addition, the audience consisted of 1000 professional dancers and judges as well. But Horwath ended up doing pretty well.

"When they...showed it on the

Pain, Shame, Insane: On ESPN's new sports reality show *I'd Do Anything*, David Horwath, a fourth-year Civil Engineering major, learned how to ballroom dance and dangled from a blimp 800 feet above the Atlantic Ocean—all so his sister could get the chance to play with the U.S. women's soccer team.

By Amanda Thomas / STUDENT PUBLICATIONS



## CAMPUS RESEARCH REVIEW

# Beyond the bit: one step closer to quantum computing

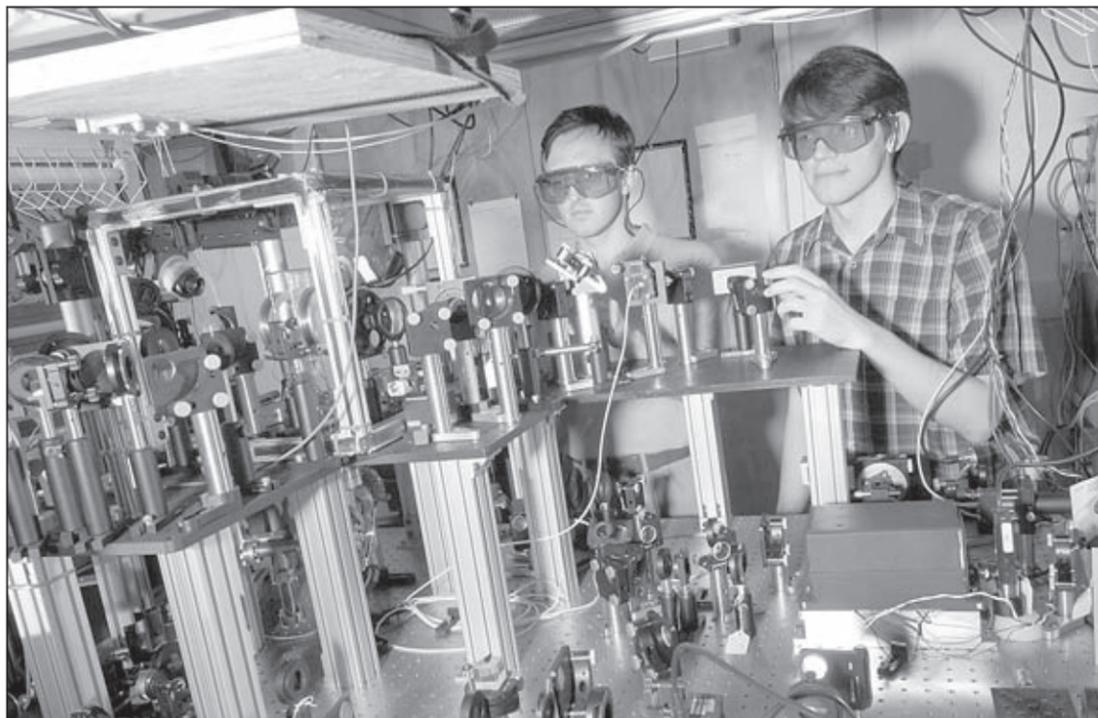


Photo courtesy Institute Communications and Public Affairs

Alex Kuzmich, assistant professor in the School of Physics, and Dzmitry Matsukevich, a third-year Physics graduate student, have successfully transferred quantum information from matter to light—creating a "network node" that could be a building block for quantum communication networks in the future.

By Joshua Cuneo  
Senior Staff Writer

A new advancement in quantum computing and communications, often hailed as the breakthrough computer technology for the 21st century, has come to light—thanks to a team of scientists in the School of Physics.

Alex Kuzmich, assistant professor of Experimental Quantum Optics, and Dzmitry Matsukevich, a third-year Physics graduate student, have successfully transferred quantum information from matter to light.

This procedure creates a quantum network node that exploits the advantages of both matter and light, which may prove beneficial in the construction of quantum

communication networks.

"A really big issue in quantum information systems today is distributed quantum networks, and for that, you must be able to convert quantum bits of information based on matter into photons," Kuzmich said.

"[Quantum communication] is the safest way to transfer information from one point to another."

Dzmitry Matsukevich  
Physics graduate student

Quantum computers and communications systems depend on storing information on atoms and photons. While atoms are stable and good for long-term storage of information, they do not travel well.

Photons, on the other hand, can travel for miles down a fiber optic cable but are tricky to store. The team's experiment may allow for communications systems that take the best of both worlds, by

See *Quantum*, page 14

# For men on color guard, flags are anything but “girly”

By Kristin Noell  
Senior Staff Writer

He is out there on the field during the football game, giving the best performance he can. He always gets the right amount of spin and rarely drops; he even catches his own tosses.

No, we're not talking about Reggie Ball. This is Marc Holcomb, a senior Film/Video major at Georgia State and one of only two men on the Georgia Tech Color Guard.

At a school that is predominantly male, being in the minority can draw attention, and sometimes even ridicule. The two men are sometimes openly insulted, particularly at football games.

“The other day at the Virginia Tech/Georgia Tech game,” Holcomb said, “I

walked out with my flags, getting ready to go out on the field, and somebody screamed ‘flag boy’ from above my head.”

Holcomb tries to take it in stride. “I turned around and waved, because I *am* a ‘flag boy.’ I spin flag; I’m a boy.”

Holcomb first started guard in the fall of 1998 as a sophomore in high school. After two years, he took a break to do other things within the band program. He returned in the spring of 2004 when he joined Tech’s winter guard.

This is Holcomb’s second season on Tech’s guard, though his first fall season. The fall sea-

son differs from the winter one in that the fall guard’s primary performances are at football games, adding a visual element to the band’s performance, while the winter guard performs at indoor competition in front of judges.

However, he didn’t find out that he could be part of Tech’s guard until his third year of college.

As a Georgia State student, “I didn’t know that I had the opportunity to be in the Georgia Tech band until last year,” he said.

According to Holcomb, since his time on Tech’s color guard, he hasn’t experienced too much discrimination for being a guy.

“That was actually *my* first comment,” he said, “and it didn’t bother me, and I don’t really care.”

Holcomb and his fellow members know that guard is hardly a feminine activity, after all.

“You come out and spin guard, do a band camp, and you’ll see it’s not a girly thing,” he said. “You get injuries. You have as many injuries doing this as playing football, playing baseball.”

“You get people that knock their teeth out; you get people [who] break their thumbs, break their wrists, break their ankles [and] smash their noses in. It’s definitely not a girly activity,” he said.

Holcomb said he participates in guard because he enjoys its

artistic quality and the fact that it requires different skills than playing in the band—which he also did during high school.

“It’s not more difficult; it’s not less difficult; it’s just a different kind of difficulty,” he said. “It’s just more interesting to me. I like doing flag work because it’s more intricate and more artistic.”

Being on color guard also requires a fair amount of dancing skill, which is perhaps why so many people call it a feminine activity.

Although one might expect otherwise, the color guard’s 1:16 male-to-female ratio (32 women and two men, not including the instructor), a far cry from Tech’s normal 7:3, does not keep Holcomb and the other male participant together all

the time.

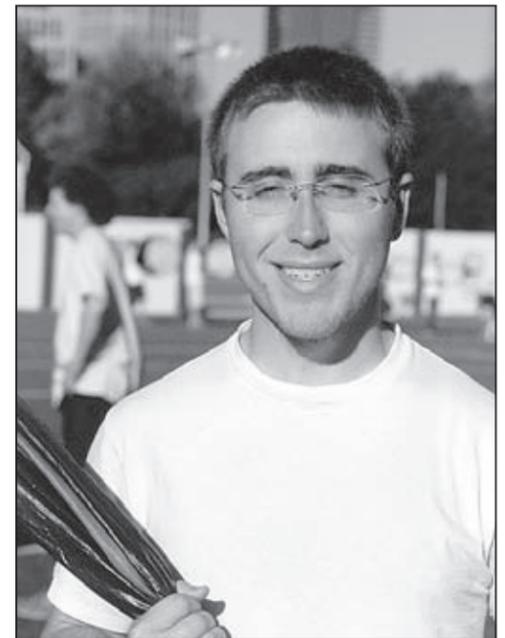
“We actually don’t talk that much,” he said. “He does weapon and I don’t, so we don’t spend a whole lot of time on the same parts of the field.”

“We do have a common bond that we are the only guys on the guard,” Holcomb said, “but it’s not something that’s so completely unifying that we spend all of our time together.”

Therefore, it is not surprising

See Guard, page 13

Marc Holcomb is one of two men on the Georgia Tech Color Guard. Though he sometimes receives flak for doing what is popularly viewed as a “feminine” activity, Holcomb says guard is hardly girly.



By Andrew Saulters (above), Jamie Howell (below) / STUDENT PUBLICATIONS



## SLIVER

[www.nique.net/sliver](http://www.nique.net/sliver)

Feel the halfie sexiness!

Two words: manners.

i hate being in love with someone who i know will never ever be able to love me back

See page 14 for more Slivers!

**Guard** from page 12

that being very much in the minority is not difficult for Holcomb, who said there is “no problem with the ladies.”

So what is it like being around so many females for so long?

“It’s a lot of estrogen, but it’s a lot of fun,” he said.

And there are perks. “You get a lot of insight that makes your other guy friends jealous,” Holcomb said. “They’ll come to you like, ‘I don’t understand why my girlfriend does this’ and I know the answer because I’ve been around girls, just girls, for so long...so girls will talk around me and I learn these inside things that a lot of guys don’t get to hear.”

Certain elements of women’s conversations have ceased to bother him as well.

“You learn not to flinch when you hear the word ‘tampon’ or other things about that sort of thing,” he joked.

If anything, Holcomb seems to enjoy spending his time being surrounded by women, and guard is a far from feminine pastime for him.

In fact, he said he may continue after college.

“I don’t know if it’s something that’s going to be feasible when I’m in the workforce,” he said. “I don’t know yet.”

**ESPN** from page 11

television, my sister was screaming the entire time, but I couldn’t hear anybody; I was so focused on what I had to do,” he said.

Bracken won the event, eliminating Johnson, who had not yet won a challenge.

So, where did the shame come in? “The shameful part of that was... our outfit,” Horwath said. The three men had to wear ruffled silk shirts with a low V-cut—and extremely tight pants. “These pants were so tight...it took me forever to get them on,” he said.

In addition, Horwath, who was of a bigger build than the other two men, got the short end of the stick when it came to the color of his outfit. “Of all colors, I get purple. I was like, the other guys got red and blue, and I got purple?”

“The host... said, ‘You’re a gigantic Barney,’” Horwath laughed.

For the challenge, each contestant would be taken out over the Atlantic Ocean in a giant blimp. Two 40 ft. cargo nets, each with six tennis balls attached, would be suspended from its underside.

The contestants had to climb down one net, collecting the balls along the way, make his way over to the second net, and climb back up to the blimp, collecting as many additional balls as possible—all from 800 ft. in the air. Scoring was determined in part by the number of balls recovered and the contestant’s time.

“The first couple steps were the hardest...looking down and all you see is water,” said Horwath, who had to go first. He got through the course with no major problems, collecting all 12 balls. However, his foot got stuck in the net near the end of the course, and with strong winds twisting the nets, the situation turned dangerous.

Horwath couldn’t get his foot out of the net, and the crew, trying to help him, tightened the tension in his harness, cutting off his circulation. In addition, Horwath was on the verge of exhaustion. “I climbed a couple more feet and collapsed; I

had nothing left,” he recalled.

It took all three stunt men, the host and the cameraman to pull Horwath back into the blimp, and by that point, he was nearly unconscious.

“From when I was dangling until when we were almost all the way back on the ground, I have no recollection of what happened,” he said.

Back on the ground, Horwath watched Bracken take his turn. Bracken was unable to match Horwath’s climbing height, but Horwath, 800 ft. below, thought Bracken had won. So when he heard the results, he and his sister were ecstatic. “It was awesome because one second you feel like you’d lost...and then the next second you’ve won,” he said.

**“From when I was dangling until when we were almost all the way back on the ground, I have no recollection of what happened.”**

**David Horwath**  
Fourth-year CE major

lyn’s] so excited; she can’t wait to meet the team,” Horwath said. In order to work around both parties’ schedules, they’re looking at Christmas break or next summer. “They’ll either bring the team out to Atlanta or fly my sister out to Denver,” he said.

When the show aired this past month, some 50 members of Horwath’s family and friends went up to ESPN Zone in Buckhead to watch. “Everybody loved it,” he said. “I still get made fun of for a couple of things, but I figured that was part of the territory.”

Though his motivation for applying was for his sister, Horwath’s perspectives have changed a little. “I don’t see myself doing that for anybody else,” though he said, “being on ESPN...was pretty exciting.”

And now, Horwath is thinking about taking the next step.

“I’m actually thinking about applying for *Fear Factor*,” he said, laughing. “I figure I’ve done this; I might as well try for something for myself.”



**Tech Up Close**

**CAN YOU FIGURE OUT WHERE ON CAMPUS THIS PICTURE WAS TAKEN?**



Email [focus@technique.gatech.edu](mailto:focus@technique.gatech.edu) for a chance to win a free student combo at Lil’ Dinos.

Last week’s Tech Up Close: Fish in the fountain at GT Hotel and Conference Center

Last week’s winner: Trey Clark

**THIS WEEK’S PHOTO:**



By Julia Bunch / STUDENT PUBLICATIONS

## Catching up with... Dan Richard

*First he won at Tech; now he's won it all, beating out men from 17 other universities around the nation for the title of Old Spice Red Zone President.*



By Jennifer Lee  
Focus Editor

On Election Day, the nation was divided over the president of the U.S.—but there was another race on Nov. 2 in which everyone at Tech agreed on the candidate.

Two weeks ago, Dan Richard, a third-year Industrial Engineering major, won the “primary” when representatives from Old Spice came to recruit students to be their next “Red Zone Body Wash President.”

Winning the primary meant that Richard was in the running

“The best part about this entire election was... not winning the trip to Hawaii, but just feeling loved by everyone that voted for me.”

**Dan Richard**  
Third-year IE major

for a trip to Hawaii against 17 other primary winners from colleges across the nation, such as Northwestern, UCLA, and University of Florida.

Online voting for Red Zone President took place over one day, on Nov. 2. Richard took the election seriously, publicizing it through every outlet possible: flyers, word of mouth, email and IM.

“I was able to send email back home,” said Richard, who is from south Georgia in Camden County. “Camden County is

See **Red Zone**, page 15

## Quantum from page 11

using matter to store information and light to transfer it.

The setup, which took Kuzmich and Matsukevich a year to construct, looks like an elaborate arrangement of mirrors and lenses. It uses a laser beam and clouds of rubidium atoms to inscribe a “quantum bit” on the clouds (see box for details).

“The light emitted from one cloud is polarized vertically, and the light from the other cloud is polarized horizontally,” Matsukevich said. “When both clouds contribute to the photon emission, the polarization of the emitted photon depends on the overall states of two clouds.”

Matsukevich said that it was necessary to divide the atomic system into two clouds to measure one bit of quantum information more effectively. “For a classical computer... just 1 and 0, that’s like two states,” he said. For a quantum computer, a system can be either in one state, in the other state, or in both states simultaneously—the logical equivalent of “yes,” “no,” and “maybe.”

“It is much more difficult to encode the bit of quantum information in just one cloud,” Matsukevich said. But because a quantum computing system can make use of three states to represent information, physicists have theorized that a quantum computer could solve certain problems, such as code breaking, much faster and more efficiently than a conventional computer.

Another advantage of this technology is the construction of quantum communications systems. Unlike current networks, which are susceptible to hacking and security breaches, a quantum network would

### HOW A QUANTUM BIT IS BORN



- 1) A simple laser beam is split and passed through two separate clouds of rubidium atoms. This forces each cloud to emit light that is combined into a single photon when the lasers are recombined at the other end, a photon that is quantum-mechanically entangled with both clouds.
- 2) According to quantum mechanics, this entanglement means that altering the photon’s polarization affects the quantum state—that is, the overall excitation state—of the clouds. Kuzmich and Matsukevich manipulate the photon to inscribe a quantum bit upon the clouds, or, in other words, to alter the clouds to take on a predetermined quantum state.
- 3) A few hundred nanoseconds later, Kuzmich and Matsukevich pass another laser through the rubidium clouds, forcing the clouds to emit another photon. This photon’s polarization represents the quantum state that the researchers inscribed into the system in step 2. Information about the atomic system of rubidium atoms has now been transferred to a light particle, representing one quantum bit of information.

be theoretically immune from eavesdropping.

“When you measure the quantum states, you change the quantum state measurements. It’s the basic law of nature,” Matsukevich said. As a result, it would be impossible to “eavesdrop” on a quantum network without leaving some sort of trace that would be immediately detectable.

“People can... deal with quantum communication in such a way that they will see if somebody is trying to intercept your message or listen,” he said. “So basically, [it is] the safest way to transfer information from one point to another.”

Which leads Kuzmich and Matsukevich to the next step: sending the photon from one chamber of rubidium atoms across a fiber optic line to a second chamber.

“Then [we’ll] build a third cham-

ber, a fourth chamber, increase the efficiency of our chambers, [and] make it... real quantum communication,” Matsukevich said.

However, there is an inevitable loss of signal strength when light is sent down a fiber optic cable, so Kuzmich and Matsukevich are working to construct a quantum repeater, which would amplify the signal.

For their research, the Tech physicists used light at a wavelength of 780 nanometers. For transmission in conventional optical fiber networks, however, they will have to switch to the 1550 nanometer wavelength that has become standard in the telecommunications industry.

Matsukevich predicts that applications of this technology will not appear for at least five to 10 years, given the time required to conduct the proper research and develop efficient, working systems.

## SLIVER

[www.nique.net/sliver](http://www.nique.net/sliver)

i wonder how GT police would respond if you called and told them that a buncha phys 2112 students were getting raped tuesday night at 6

When the country falls apart and Iraq turns into another Vietnam - remember how you voted.

to the loser throwing rocks at squirrels...is your life really that sad that you have to beat up on a squirrel?

Calvin Johnson rocks my world

C. Johnson - you are awesome

hey calvin johnson, can you play at quarterback too?

Keith Jones is the new David Nelson.

RAFTING IS AWESOME!

we all fell out in one giant clump...and then almost drowned yup stayed up saturday night studying for ME test on monday. life here is great. PS dont ever in your right mind take chen for 2211 he is a slave driver

The College Republicans’ recent comments about Tech’s Pride Alliance were absolutely horrible. To call the Pride Alliance a “sex club” is an attempt to slander a group that exists to provide a haven f I think I’m the best guy kisser in the world. All of my reviews have given me two nipples up.

We need to throw the ball to Calvin Johnson a whole lot more.

AJ, get over yourself and be a man. The world does not revolve around your conversations. I am not your effing babysitter; stop blaming your faults on me. And for the record, I do not like your hai bush lied to start a war to make money involving the deaths of thousands of americans and billions of our cash. 4 more years, awesome!

Why is there lag with Slivers? (11/7/04)

wootwoot

“ouuh, I haven’t felt water on that part of my body yet...feels kinda cold.”

There are drugs on campus?? Do you mean something besides caffeine, happy pills, and NyQuil??

Why have the best memories of my past become the worst ghosts of my present?

What drug problem? There is no drug problem on campus. They are widely available.

W is for pWnd

This I-Raqi is gonna Jihad your ass if you don’t shut the hell up!

See page 19 for more Slivers!

**Red Zone** from page 14

such a small community...whenever something like this happens, the entire county knows about it."

Richard's sister Andrea, who attends Georgia Southern, also sent a flurry of emails and IMs around her college.

And, of course, Richard drew on his loyal base of "fans" here at Tech: friends were leaving away messages that read, "Vote for Dan!", posting to message boards and forwarding his emails.

The six degrees worked its magic, and many students who had no idea who Richard were good-naturedly voting for him anyway.

The fact that it was an online vote may have also given him an edge.

"My friend Adam pointed out that we go to the school who rigged the Time Magazine Man of the Century online so that the winner was George P. Burdell," Richard said. "What did Old Spice think they were getting themselves into by letting Tech participate in this whole thing?"

He's not complaining, though. On Election Day, "I did skip a class to stay back [and]...watch the numbers go up and down," Richard admitted. "I started off at the beginning of the day way behind and this one guy from Ohio State had 60 percent of the vote and I had about 15 percent."

So he took action, and many IMs later, Richard took the lead.

According to the website, results would not be announced until Friday. Richard, however, received a call early in the afternoon the next day from TeamWorks Media, the PR group for Old Spice.

"They heard that I tried out originally by playing my harmonica and singing a song, so they...said, 'We have our entire team in here on

speaker phone. We want you to sing and play the same audition song you did way back at the beginning.'"

He did, and then they told him the good news—he had won.

"I started jumping up and down," he said.

"I was all by myself [in my room], but...I think the people down the hall heard me, and I was just yelling."

The trip to Hawaii is planned for sometime in February. It is a five-day, four-night package for two, and, as planned, Richard is taking his sister.

A spa package and golf package are also included. Richard doesn't know how to play golf, but, he says, that won't stop him. "I get the chance to play golf in Hawaii, and not many men can say that," he said.

Richard also took advantage of his "presidency" by asking TeamWorks Media if they can get him on *Late Night with Conan O'Brien*, his favorite show.

"They said [they'll] look into it," he said. "So after I do my homework,

I'm going to be writing a pitch, which the media people will review and send to *Conan*, so...cross your fingers, knock on wood, rub a rabbit's foot, say a little prayer, do a little dance... whatever it takes."

Richard also gets to see himself on TV, along with the other two Tech candidates, Matt Toner and Matt Drake.

The commercials they each had made for Red Zone Body Wash aired this weekend during the NC State game. All four commercials featuring Richard are also available at [www.oldspice.com](http://www.oldspice.com), which also features a short Q&A with him.

Regarding the commercials, Richard is pretty happy with the way they turned out. "Maybe it's just self-consciousness, but I kind of think I look really nerdy," he laughed. "Maybe I represented Tech well."

The Q&A, on the other hand, was a different story. Richard provided original answers to a set of questions Red Zone representatives had sent him.

After looking over Richard's answers and making some modifications, they sent him back a final copy for his approval.

"My responses [were] a little doctored up with some very, very cheesy

Red Zone plugs," Richard laughed. "For instance, it'll say something like, 'How'd you win, Dan?' And my answer was, 'I got the word out like crazy,' but *their* answer was something like, 'I couldn't have done it without Red Zone Body Wash!' I read it and thought, what the crap? When did I ever say that?"

In the end, though, Richard can't help but be a little cheesy as well.

"The best part about this entire election was honestly, not winning the trip to Hawaii, but just feeling loved by everybody that voted for me," he said. "It just really felt awesome that day."

**"My [Q&A] responses [were] a little doctored up with some very, very cheesy Red Zone plugs.**

**Dan Richard**  
Fourth-year IE major



Photo courtesy TeamWorks Media

Dan Richard, a third-year IE major, showed he could rally a crowd at the Miami game, an ability that helped when it came to getting people to vote for him as "Red Zone President" this past Tuesday.

**What are YOU thankful for?**  
Email [focus@technique.gatech.edu](mailto:focus@technique.gatech.edu) if you have a Tech-related Thanksgiving story to share.