Proposed master’s program in music technology ready for consideration

By Jennifer Lee
Novice Staff Editor

In the recent SGA elections, several candidates’ platforms included the creation of a music technology major. However, it looks like the initiative is already well on its way, as the School of Music has submitted a proposal for the creation of a master’s program in Music Technology.

Heading the effort is Gil Weinberg, assistant professor and director of the School of Music Technology. However, the program would serve as director of the master’s program.

Though it has not yet officially been approved by either the Academic Senate or the Board of Regents, “the proposal is ready on the Dean’s table, and probably if everything goes well, it will [begin] in Fall 2006.” Weinberg said.

Though it is currently a two-year program of study with 48 credit hours, Weinberg was quick to point out that the requirements could change as the proposal moves through approval stages. Weinberg said that the school will get a head start this coming fall with two students from Tech, who will work toward an undesignated Master of Science with a concentration in music technology; a degree option offered by the College of Architecture that allows students to tailor their degree.

“The master’s program in Music Technology expands on recent growth of the music program in the past years—growth which, according to the School of Music website, includes $650,000 worth of renovations to the Couch Building, in part for a new recording studio and computer lab. According to Weinberg, the decision to offer a music technology program was also motivated by the growing need for the field in today’s society, especially on the internet and in the video game industry.

“There’s a huge expansion in music technology,” Weinberg said. These days, he said, employees must be increasingly familiar with both the musical and the technical side when they create products. For example, “companies that create musical instruments, more and more, need people who are proficient in both areas,” he said.

In developing the master’s degree, Weinberg said that the school “would like to think there will be a big culture shock.” Weinberg also pointed out that Ray, who is somewhat of an internet celebrity and who has spoken about his theories only once before, at a lecture at MIT in 2002, was invited to speak at Tech by fourth-year Industrial Engineering major Eoin Grosch.

According to Ray, nature is cubic. The globe can be encompassed by a cube, with the four sides representing night, sunrise, day and sunset. The human head is a cube with the face serving as one corner. Life is cubic with the four stages of baby, child, parent, and grandparent.

Ray also places heavy emphasis on natural balance through the existence of opposites: male and female, proton and electron, black and white.

From this, Ray has reached some conclusions about the state of modern society. He claims that his cubic theory will lead to innovations such as the safe disposal of nuclear waste and an end to water pollution and that any failure to realize that theory is a conspiracy on the part of academia. He mentioned that if people don’t come to realize that time is cubic...that we’re all going to become cannibals,” Grosch. “He thinks the world’s going to break down if we don’t realize that we’re educated stupid.”

The event, which was held in the Instructional Center’s Tenenbaum auditorium, was sponsored by Badical Industries, an unchartered campus organization dedicated to increasing student happiness.

“Concerning this, I think students present at Thursday’s seminar may have found Ray’s ideas convoluted, it was this confusion that first drew Grosch to contact Ray through his website,” Grosch said. When he first started reading the website, he thought, this guy must be a joker. And then he saw an email link, so I emailed Dr. Ray, and I asked him to come to Georgia Tech, Grosch said. “I wanted to find out more about the Time Cube and [wanted] to see if he could explain it clearly, and I thought it would be an interesting thing to do.”

The seminar was a two-hour presentation divided between time for Ray to lecture on his theory and for students to either ask questions or argue for or against the Time Cube.

On his website, Ray offers $10,000 to anybody who can successfully disprove his theory.

Grosch estimated that 230 people attended, mostly students, although that decreased throughout the presentation as people gradually trickled out the door.

Some students who attended said that they had also first heard about Ray through his website and wanted to listen to his ideas firsthand.

“Most people are drawn to his site because of his rant[s] and the odd way that he writes, and he leaves out articles like ‘the,’” Grosch said. “He told me, ‘Hey, I’m pretty good at manipulating people’...He goes to the extreme to get people to pay attention.”

Grosch also pointed out that Ray does have a following of hardcore cu-

As semester ends, students gear up for summer abroad

By Esther Fung
Contributing Writer

As the summer semester approaches, many students have something on their minds besides final exams: preparing for study abroad.

According to the Office of International Education (OIE), there has been a steady increase in the number of students who apply for faculty-led study abroad programs abroad over the last few years.

This year, there are 672 graduate and undergraduate students who will be participating in these summer programs, a slight increase from 664 last year.

“I intended to go last year, but I was nervous and [put] it off until this year,” said Rodrigo Pemueiller, an ISYE junior.

Pemueiller will be going to the School of ISYE’s Singapore and Beijing program, and is one of a total of 98 students this summer who will be heading for Asia for various study abroad programs.

“I wanted to go somewhere else for the experience, and it would be good to try the Asian cultures,” Pemueiller said.

However, he did voice some of his concerns. “For Singapore, I don’t think there will be a big culture clash,” he said. “As for Beijing, I expect to be totally lost, basically I don’t speak Mandarin...Language barriers are just one of the more practical concerns raised when students are on the verge of leaving for their respective programs.

According to Amy Henry, associate director of OIE, these questions are much different from the questions students usually raise earlier on in the semester.

In the initial application period, “the three primary things students ask regarding the summer programs are credit, location and cost,” Henry said. “Where can I go to earn credits for my course or major, are there scholarships available—questions like that.”

Students are also benefiting from scholarships, with the Students Abroad with Regents Support (STARS) scholarships supporting 36 students this summer. Most scholarships are $500; some are $1,000. To qualify for the scholarship, applicants had to write an essay that was largely the deciding factor.
program, Weinberg has looked to a variety of other universities. For example, he has talked with members of Georgia State University, which offers an undergraduate degree in music technology. "[There are 11] or so very good programs that we're looking to for ideas," Weinberg said.

However, he seeks to make Tech's program unique, combining elements of more technical programs such as MIT's Media Lab and more musical programs such as Columbia's Computer Music Center, which is composed mainly of musicians who are familiar with computer technologies.

Weinberg also added that his goal for the first years of the program is just to gain recognition. "Initially, I just want to put Georgia Tech on the map in music technology," he said.

Weinberg said that he was confident the master's program would not be at a disadvantage despite the lack of a music major. Currently, the School of Music only offers music minors and certificates.

In fact, Weinberg suggested the opposite may be true: that creating a music technology program may help grow the department in other ways. Frank Clark, director of the School of Music, was hired by the Institute in 2002 partly because of his support of music technology. With the additional support of the Provost's Office, the school has since hired three tenure-track positions, which include Weinberg and Director of Choral Activities Jerry Ullrich.

"Before that, there weren't any tenure-track faculty," Weinberg said.

With the development of the master's program in Music Technology, the department has plans to hire additional tenure-track positions this fall. The recruitment of tenure-track faculty is another key component for growth, according to Weinberg.

"Enhancement of the music program maybe will start with technology, but continue to project in other directions."

**Gil Weinberg**

Dir. of Music Technology

"Enhancement of the music program maybe will start with technology, but continue to project in other directions."

Weinberg anticipates that the program will attract a more well-rounded type of student, regardless of their undergraduate background.

"We're really looking for Renaissance-type students," he said. "If you have the undergrad in music, you're definitely a candidate, but we do want you to have some technical ability—not necessarily only using [musical] notation programs, but more low-level." Likewise, mechanical engineering students would still need to have a solid musical foundation in theory and composition.

He added that this Renaissance attitude already flourishes at Tech.

"Many people here really want to explore and combine both their artistic slant and technology side...[music technology] is definitely one of the ways that we hope to provide it," he said. Currently, 50 to 60 students are enrolled in music technology courses this semester.

In addition, the program may provide employers with the kind of multitalented people they are seeking. "The need from the students and the need from the world both are calling for this program to happen," Weinberg said.

Weinberg pointed to a robotic drummer in one corner of his office as an example of the kind of projects students are already working on. "These are machines that actually listen to what you play, figure out what you play," and play back the music in an acoustic manner instead of as a flat digital sound, he said.

The existing program has already started to gain national recognition. Weinberg supervises student groups who are involved in various projects and performances relating to machine musicianship. He and his groups have been invited to conferences in San Diego and Miami and will be performing in Vancouver later this year.

"I definitely feel like we're starting to spread the word," Weinberg said, adding that a master's program can only continue the momentum.

"After this year, when we have two dedicated students...I'm sure we'll grow much more," he said.
The disadvantages of not being a U.S. citizen
International students talk about how they deal with scarce financial aid

By Vigneshwar Kalyanasundaram
Contributing Writer

With a diverse student body, many students take Tech's international population for granted. But international students, though classified with other out-of-state students for tuition purposes, are in a league of their own when it comes to financial aid.

According to the Office of Student Financial Planning and Service's website, international students are not eligible for federal or state financial aid programs, nor the institutional funds that the office administers. So how do international students deal with the financial pressures of college?

The situation is especially difficult for undergraduate international students. While graduate students can often secure jobs as research or teaching assistants; undergrads have no such luck. Even for undergraduates who obtain RA or TA positions, compensation is by the hour in most cases.

Most international students agree that no one can really be faulted for the near-impossibility for international undergraduates to receive funding.

"It's not just a policy or a decision that Tech chose to make," said Aditya Sanokar, a Computer Science sophomore from India. "It's common for all undergrad schools here."

Most international students are also aware of Tech's policies before they arrive and must prove their ability to financially sustain themselves for the period of study in order to secure an F1 visa. As a result, for an international student to study at Tech in the first place, they must have the ability to pay for his or her education.

Considering the students have been dedicated and resourceful enough to fly across the world, they don't give up easily on searching for forms of aid. The out-of-state tuition waiver is a form of aid that is available to international students in case of a financial emergency. In this case, the student pays in-state tuition for the semester(s) in which he or she has trouble meeting the financial burdens.

This form of aid is very helpful for international students who experience a sudden change in financial climate at home and require assistance to stay in college—though ironically, this form of financial assistance is contingent on a situation that no one wants to be in.

International students are eligible for student loans, however. Unfortunately, many of these loans require a co-signer who is a citizen or a permanent resident of the U.S.

Students can and do take loans from home, but these loans are generally expensive considering that the U.S. has some of the lowest loan rates in the world.

External scholarships are also scarce, as many are restricted by nation of origin and are generally higher in prestige than monetary value.

It is also a common sentiment among international students that they should not spend too much money on college, an obligation that many feel is strong enough to merit spending another year in school. As a result, many international students turn to the Department of Professional Practice to earn back the money they spend on their education.

"Considering that almost all the students around were on HOPE or at least some other scholarship, I tried to minimize the load on my parents' bank accounts by attaining a co-op and some other kind of part-time job," said Arun Pai, an Electrical Engineering junior.

Restricted by several laws that prevent taking up jobs outside campus, international students can be authorized by their department to do work related to their degree. Many international students thus use the co-op and internship programs to attain their dreams of a world-class degree with some spare change left over at the end of it.

The only drawback with this approach is that students actually have to look for, find and secure a job that they would enjoy doing, since these programs have a strong impact on their careers.

International students also have a disadvantage when it comes to part-time jobs. Many international students are restricted from working off campus. Moreover, even on campus, F1s (as they are affectionately called due to their visa status) cannot work more than 20 hours a week. Therefore, international students with on-campus jobs that they enjoy are hard to come by.

International students may also not always have enough for the small things in life. "Since you have the money to finish your studies, you feel comfortable," said Rohit Zacharia, a Mechanical Engineering junior from Dubai.

"But there is always this itch to save up some money and buy that Jeep over a Toyota."

Some students may even pursue more nontraditional avenues for making some spare cash, such as trying out for Buzz to get athletic funding and selling items feverishly on git. ads.

Regardless, it is inspiring to see international students show the commitment, dedication—and in some cases, desperation—to offset the costs of their education while knowing full well that they can afford to finish college without these hassles.

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**During her undergraduate studies, Arshine Hecobian, now a graduate student in Earth and Atmospheric Sciences, used to work on campuses for minimum wage, since most international students are restricted from working off campus and for more than 20 hours a week.**
bers’ who take his theories to heart, thought was unlikely that more than a few were in attendance.

Though Grosch spoke to several faculty members to try and get them to attend the lecture, there were none present.

“I was kind of disappointed,” Grosch laughed. “It would’ve been interesting. Dr. Ray might’ve put them on the spot.”

Aside from problems with the sound equipment and Ray’s tendency to mumble into his microphone, Grosch thought that the event went well.

“People had a good time, and maybe it opened their minds, you know?” he said. “I got some emails, and just people stopped and thanked me for bringing the wisest human to the Georgia Tech campus.”

“I enjoyed it, actually,” said Alex Rudnick, a fourth-year Computer Science major. “Time Cube makes a lot more sense when explained in person. Now I think of it just as a metaphor that this fellow’s taken a bit too far, and maybe he’s a bit too convinced of his own reasoning abilities.”

Rudnick said he was annoyed at people who didn’t appreciate Ray, regardless of how they felt about his ideas.

“I mean, he’s a man with a theory. That’s something most people don’t have these days, is a theory,” he said.

Some students, however, passed off Ray’s theories as nonsense and left the theater in the middle of the seminar.

“I noticed that a lot of people walked out in disgust,” said Martin Robinson, a fourth-year Computer Science major. “I suppose they either thought that Gene Ray was the butt of too many jokes or that his theories were bunk. I think that, in general, people were very respectful.”

Others disagree, citing the mocking and insulting gestures from some members of the audience.

“I honestly felt very sorry to see a man who is out of touch with reality, ridiculed by uptight students who had nothing better to do with their time than destroy an old man,” said Whitney Rudin, a first-year Biology major. “I feel Badical Industries did not mean any disrespect...In the end, sadly it was nothing more than a freak show.”

Rudin cited one incident in particular, when a student stormed out of the theater in protest. Grosch said he followed the student out into the hall.

“He thought it was cruel that we were parading him around in front of everybody as an idiot. But I said to him that this wasn’t my intention and that I just wanted to give him the opportunity to speak here,” Grosch said. “I think most people kind of took it lightly, which I don’t blame them for doing, because the whole Time Cube thing is beyond me, and Dr. Ray can’t really explain it, either.”

However, “I also think that Gene Ray was enjoying himself quite a bit. It is easy to see that he likes to speak to students,” Robinson said. “I’m glad we live in a society where people like Gene Ray are not locked up and beaten, but instead respected in their own way.”

Fourth-year IE major Eoin Grosch with Gene Ray, who lectured on his Time Cube theory last Thursday. Ray, who previously lectured at MIT in 2002, received mixed reactions from the Tech audience.
CAN YOU FIGURE OUT WHERE ON CAMPUS THIS PICTURE WAS TAKEN?

Email focus@technique.gatech.edu if you think you know the answer; check to see if you won in the next issue.

Answer to previous Tech Up Close:
Cannon outside Navy ROTC building

Correct submissions:
None
Getting Crafty

By Grace Mooken
Contributing Writer

Remember arts and crafts hour when you were five? When you were completing your differential equations test last week, weren’t you really wishing you were instead finger painting? Okay, maybe not, but with my hectic schedule as a Tech student, I’ve been searching for a relaxing hobby, and tucked away in the corner of the third floor of the Student Center, I found it: the Crafts Center.

As I cautiously walked into the Craft Center, I felt as though I were uncovering a hidden treasure among the other administrative offices on the third floor. I was bombarded with something I don’t often see at Tech: art.

Lining the walls of the Crafts Center are shelves upon shelves of ceramics in various stages of their life. Some had just been born of students’ hands; others, their life. Some had just been of ceramics in various stages of the Crafts Center. I found it: the Crafts Center.

As I peeked into an adjoining room, I discovered the “Play Pen,” a room for students who just want to relax and make a small project. Here, students can make a piece of jewelry; paint a flower pot (this month’s feature project); make sand art; decorate a dry erase board; make origami or create their own button. Pricing for these projects range from $0.50 to $2.

Though I was tempted to throw my artistically-challenged self in the safety of the Play Pen, I forced myself to play in the big leagues at the main work bench.

Since the last art project I had done was around the time I was perfecting my shoe-tying technique, I decided to take it slow and picked out one of the pre-made ceramics mugs that the Crafts Center supplies in limited quantity.

After picking paint colors and collecting brushes, I sat down to work on my mug, which I planned to give to a friend as a gift. As I picked up a navy blue paint container, the lid, which hadn’t been closed properly, popped up and blue paint spilled all over my shirt and on my jeans.

While running to the sink and frantically dabbing my clothes with wet paper towels, I started to have second thoughts. Who did I think I was? I’m an engineer; art isn’t exactly my forte.

Luckily, after 10 minutes of self-deprecating thoughts, I decided to give my mug another try...with an apron on.

I carefully made a design with pencil and then followed the Crafts Center assistants’ directions, such as applying three coats of each color and letting each layer dry before adding the next layer. Picking up brushes and staying neat was a challenge, but my shaky brush strokes eventually became smoother.

A few hours later, as I finished my piece with a couple of layers of gloss, I looked around at my fellow workers, who were all absorbed in their various pieces. I felting of accomplishment and tranquility washed over me. As I carefully put my mug among others to be put back into the kiln, I couldn’t help but cherish my short but sweet getaway to Tech, soaping a mud clean (bottom).

Ever wanted to check out the Crafts Center? ‘Nique writer Grace Mooken, painting a ceramic mug at top, did just that. Ewa Mocek, whose husband is an exchange student at Tech, scapes a mud clean (bottom).

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