Bee strategy helps servers run efficiently

Honeybees somehow manage to efficiently collect a lot of nectar with limited resources and no central command—after all, the queen bee is too busy laying eggs to oversee something as mundane as where the best nectar can be found on any given morning.

After studying the efficiency of honeybees, Craig Tovey, a professor in the H. Milton Stewart School of Industrial and Systems Engineering, realized through conversations with Sunil Nakrani, a computer science colleague visiting from the University of Oxford, that bees and servers had strikingly similar barriers to efficiency. “I studied bees for years, waiting for the right application,” Tovey said. “When you work with biomimetics (the study of how biological principles can be applied to design and engineering), you have to look for a close analogy between two systems—never a superficial one. And this definitely fit the bill.”

Honeybees have a limited number of workers at any given time to fly out to flowers, collect nectar, return to the hive and repeat until the nectar source is depleted. Sometimes, there’s an abundance of nectar to be collected; at other times nectar is scarce. The bees’ environment is constantly changing. So how do the bees manage to keep a steady flow of nectar coming into the hive?

Online training will be available at the Office of Procurement Services, the module provides computing power until all the servers continue running efficiently.

Flock Continued, page 2

Jackets’ head coach Gailey dismissed after six seasons

Tech Athletic Director Dan Radakovich announced last Monday afternoon that he had dismissed head football coach Chan Gailey. No immediate successor has been named. Although the Yellow Jackets completed their regular season, the 7-5 team is expected to attend a bowl game, which will be coached by defensive coordinator Jon Tenuta.

In arriving at this decision over the course of the last several weeks, I have sought much input. I have communicated with many people who have longstanding, deep ties to the Institute,” Radakovich said. “I received and read thousands of opinions. Many were well-conceived and thought-provoking.”

Radakovich cited a lack of an “excited and energized” fan base, saying he had to ask whether the football program was moving forward and improving, as well as attracting new fans. “This is a very proud institution with a deep and rich football tradition,” Radakovich said. “It is our expectation to field a football team that not only competes at the highest level, but (also) energizes and entertains our fan base.”

“I expect our new football coach to reach out across Atlanta and the state of Georgia with leadership.”

Gailey continued, page 3

The next step, Pearson said, requires the principal investigator
“QUOTE—UNQUOTE”

“We have to be cautious and not think everyone online is crazy. With about 10 million players, and only two willing to do what these two did, it’s not a meaningful percentage.”

—Experimental Game Lab director and LCC Associate Professor Celia Pearce, commenting on the news that a 2-year-old girl was abandoned because of the mother’s and her boyfriend’s affinity for the World of Warcraft computer game. (Houston Chronicle)

A place to call home

Class compiles archive on tech student–founded homeless advocacy group

Robert Nesmith
Institute Communications and Public Affairs

Associate Professor Hugh Crawford learned what a fluid situation planning his honor’s English course can be, while his students parsed complex information on an interesting facet of Tech’s history.

Armed with the theme of Domestic Space, Crawford propped up a book on efficient living spaces and a collection of essays on buildings and dwellings.

“Last summer was the ‘summer of the carbon footprint,’” so I decided to have the class based on homes and living spaces,” said the LCC professor. He also included syllabus with newspaper articles, one of which was about the modular homes provided to the homeless by the Tech student-founded, non-profit organization, the Mad Housers.

“By the third class, the students asked if they could build one,” Crawford said. “The course took off from the standpoint of typical research paper on homelessness.”

In studying how to build one of the group’s houses, the students started collating the Mad Housers’ archives from a variety of different sources, including one of the founding members of the group. “There is an incredible history at Tech,” Crawford says.

In 1987, two College of Architecture graduate students formed the homeless advocacy group. “One presented a thesis on the problem of homelessness, and the other a thesis on how to build a modular hut for housing,” Crawford said. While membership has waned over the years, the group is still going today and is emulated in other cities, most notably Chicago.

As the class evolved, Crawford says his role also changed into more of a facilitator than the traditional teacher. “During this project, I’ve just let go,” he said. “I’m coordinating and working out the problems.”

And Crawford says it was coincidence that the class undertook this project just prior to Tech’s Homelessness Awareness Week. Several students presented their research at one of the events.

The main project—building the house and collating the group’s history—splintered off into smaller multimedia assignments and projects, including video, computer animation, posters and even a book of poetry. “We’ve shifted from being an interpretive project to an archival project,” Crawford said. “There was so much information, but it wasn’t all readily available.” Class members worked to bring together the disparate historical and archival information about the Mad Housers into one repository.

In addition, the full-sized Mad Houser house, complete with the characteristic three-bucket wood stove, will be rebuilt in the library’s Neely Lobby, along with paper materials and computer kiosks, where all the digitally compiled information will be available for the public.

According to Library Associate Director Robert Fox, the house is scheduled to be on view either the week of Jan. 8 or the week of Jan. 21. The digital material compiled by senior in the arts, Freeman, who counts as his influences turn-of-the-century composer Charles Ives and “sound installation” artist Max Neuhaus, has worked on audience-participation projects since his inaugural “Shakespeare Cuisinart” (2001). “People are inherently creative, if you give them the right opportunities,” he said.

Robert Nesmith in Institute Communications and Public Affairs contributed to this article.

For more information...

School of Literature, Communication and Culture
www.lcc.gatech.edu
Georgia Tech Library
www.library.gatech.edu
Mad Housers
www.madhousers.org
that is aggressive, creative and accessible to the media and fans.”

Radakovitch said he intended on a swift search and would establish a committee to screen potential candidates.

He thanked Gailey and his wife, Laurie, for their six years of service to the Institute. The Institute bought out Gailey’s contract—which extends through 2011—for an undisclosed sum.

“This type of transition is never easy,” Radakovitch said. “But I am confident (that) within a short period of time we will have a new head coach in place who will energize our fan base and provide enthusiastic leadership to our football team.”

Tenuta has been a member of the coaching staff for five years.

Trolley driver suffers heart attack

A Tech Trolley was involved in a multi-car crash at the intersection of 10th and West Peachtree streets on the morning of Nov. 28.

Reports stated the driver, identified as Morris Calvin Anderson, suffered a fatal heart attack. The vehicle lost control, striking four nearby cars. While the subsequent damage was classified as mostly minor, no other injuries were reported. Maintenance found the trolley, empty of any riders, to be in safe working order.

Pedestrian stop light proposed

Facilities has approached the city of Atlanta for a pedestrian-triggered crosswalk traffic signal on North Avenue.

The signal, which requires approval from the Georgia Department of Transportation, would serve the crosswalk in front of the Burge parking deck on the south and the stadium entrance to the north. According to Facilities manager Frank Lamia, a traffic engineer with the city will present the proposed signal to the GDOT in the next few weeks. If the proposal is approved, the city will place a flashing yellow light over the walk until the new signal is installed.

T-Square migration tools available

The Center for the Enhancement of Teaching and Learning (CETL) is reminding faculty members that WebCT is being retired at the end of the month. The Center offers both staff and faculty workshops to help in the migration of course content to T-Square. During the week of Dec. 10, open migration workshops will be held in the library’s Homer Rice Center from 9 a.m. to noon.

Trolley driver suffers heart attack

For more information, visit www.procurement.gatech.edu/migration.

Clough among ‘most influential’

In its November issue, TechJournal South named President Wayne Clough to its “25 Most Influential People in Southeast Tech” article. Among the accomplishments cited during his tenure are the Institute’s nearly doubling its research expenditures to $425 million, increasing enrollment to 17,000 students from 13,000, and increasing the endowment to more than $1 billion. Others on the list include former America Online chief Steve Case, entrepreneur Christopher Klaus. For more information, visit www.techjournalsouth.com.

Fleming to head Edison Fund

Chief Commercialization Officer Stephen Fleming has been tapped to manage the Georgia Tech Edison Fund, which will provide seed funding to early-stage technology companies closely aligned with the Institute.

The fund is supported by a multi-year grant from the Charles A. Edison Fund. For more information, visit http://innovate.gatech.edu.