

Trinity University hosts robot competition

By Usha Lee McFarling
Knight-Ridder Newspapers

HARTFORD, Conn. - The creators of "The Jetsons" may have predicted microwave ovens and exercise treadmills, but when it came to the all-purpose robot maid Rosie, they were way off the mark. Here we are, spinning toward the millennium, and we're still vacuuming our own floors. Where are all the robots?

Some are already here. About 90,000 robots are hard at work on America's assembly lines, putting together Ford Explorers, Pentium II chips and Mint Milano cookies. A handful of robot vocations are impressive indeed: Some scour Chernobyl's nuclear reactor core, others detonate bombs and one robot at Stanford University has performed brain surgery. (Even surgeons, a group not generally known for small egos, admit robot does are better at some tasks, like precisely placing screws into artificial hips: Robots don't get distracted and their hands don't shake.)

Impressive as these machines are, they are not "true robots",

autonomous machines negotiating through the real world. Most are fixed into position to perform rote tasks. The few working robots that move do so by remote control or by following fixed routes. "Dumb as dirt," Gregory Dudek, a robotics expert at McGill University, says of assembly line robots. "Plodding dullards," says Hans Moravec, a founder of the eminent robotics program at Carnegie Mellon University in Pittsburgh.

But set robots free to make decisions in the real world, or the closest most come, robot contests, and see what happens. At "Robocup," a robot soccer competition last summer in France, contestants wandered the field blindly, mistook opponents for the ball or got hopelessly trapped in corners. Entrants in a flying contest were described as "drunken, airborne food processors."

And here at Trinity University this week, in what's billed as the world's largest true robot competition, robots took on the role of firefighters, attempting to detect and douse a house fire represented by a candle. Many found themselves careening into walls and sometimes wheeling right into the

flames they were meant to extinguish.

It turns out the things we humans find so simple, avoiding walls, crossing uneven floors, finding objects, are the hardest things for a machine to do. Just ask Deep Blue, the genius computer that scored a coup for the silicon world by beating champion Garry Kasparov at chess: It needed a human assistant to find and move pawns and rooks during the game.

"The reason those things seem so easy is because we're specialized to do them through millions of years of evolution. To think we could match those easily represents tremendous hubris on our part," says Dudek. Indeed, what Moravec calls the "robot giddiness of the early '80s," when C-3PO was fresh in our minds, gave way to more than a decade of frustration as robot aficionados realized the computer revolution wouldn't easily translate into walking, talking and thinking machines. Frustration echoes through the names of some robot creations: One entry here was called "Migraine." Another: "The Money Pit."

"We knew it would be hard," says

Jake Mendelsohn, an early believer in robotics who organized the firefighting robot contest here. "But no one knew it would be this hard." Yet, the believers still believe. Yes, they say, robots were overhyped. Yes, the performance of early robots was downright embarrassing. "The quality of soccer play, just pathetic," sighs Moravec. But things are different now, they say. Today's robots are making huge developmental strides. And some are crawling, wheeling and climbing their way out of the lab.

Robot builders tick off the growing accomplishments like proud parents discussing crawling toddlers. They can see! They can hear! They can navigate! They can build maps in their heads! One humanistic robot developed by Honda Motors even climbs stairs. And while many of the firefighting robots competing here were klunky and error-prone, a few were sleek and stealthy, setting about their task like predators and extinguishing fires within seconds.

"I truly believe in a few years firefighting robots will be as common as smoke detectors," says Mendelsohn. Dudek agrees: "Robots

are going to be everywhere." Fine, but when are they going to start cleaning apartments?

Well, a few robots have quietly entered the personal service industry. A robot arm in Sacramento, Calif., pumps gas. Sushibots in a London restaurant cut raw fish and, next month at the International Robots & Vision Show in Detroit, a robot arm named "Isaac Fillmore" will mix drinks with varying amounts of ice, shaken or stirred. "He never makes a mistake, he doesn't overpour and he doesn't take money out of the till," says Ron Potter of Factory Automation Systems, the College Park, Ga., company who created Isaac.

A robot called "the lawn nibbler," developed at the University of Florida, can mow on its own. And, yes, there is even a vacuum. Two months ago, Eureka Co. unveiled a sleek black disk with a built-in radar that allows it to vacuum, on its own, without bumping into anything. It's not yet for sale. But robot experts like Moravec say such machines still aren't good enough. They leave random patches untouched. They

mainly crawl along walls. They get stuck too often. "The brains are just not up to anything," says Moravec. "By now, I'm jaded."

But bigger brains are coming. Computing power, cheap, fast, light computing power, is here and getting cheaper, faster and lighter every day. Such advances, meaning robots that can operate in a real world full of dropped toys, dirty clothes and napping pets, are on the way. It's not a matter of if we'll have household robots, says Moravec, but of when, and of what types of creatures they'll be.

In his book "Robot," Moravec predicts that early versions of such creatures are about five years away. They'll evolve into an array of increasingly complex and different creatures he calls "an ecology of robots." And vacuuming robots are no superficial pursuit. Moravec thinks they'll be first out. He's got one ("the dustbot") on the drawing board, for both technical and personal reasons. "I hate pushing that machine," he says.

49ers backup quarterback confident he will be cleared in rape of college student

By Clark Judge
Knight-Ridder Newspapers

SAN JOSE - An indictment unsealed Friday in Virginia's Montgomery County Circuit Court accused 49ers backup quarterback Jim Druckenmiller of raping a Virginia Tech student early last month. The indictment was returned April 13 after the grand jury heard testimony from the alleged victim and a detective from the Blacksburg (Va.) police department.

Though Druckenmiller declined to answer questions regarding the incident, he indicated he is not guilty of the charges. "I feel very confident I will be available for this season," he said Friday at the team's mini-

camp in Santa Clara. "I do believe justice will prevail."

If convicted of rape, Druckenmiller, the 49ers' first-round draft pick in 1997, could face from five years to life imprisonment. According to the indictment, Druckenmiller, 26, is accused of attacking a woman in a house in Blacksburg between 3 a.m. and 4 a.m. March 4. The woman, whose name has been withheld, went to the hospital later that morning, the indictment said.

Blacksburg is home to Virginia Tech, where Druckenmiller was a star quarterback. As he did a year ago, Druckenmiller returned to the school in the off-season. Druckenmiller's attorney contested details of the incident, charging that Druckenmiller

was falsely accused. In a one-page statement, attorney David Neufeld claimed that Druckenmiller was victimized.

"Jim and his friends were visiting some local nightspots with others," the statement read, "when the accuser openly and aggressively began pursuing him. That same evening they had sex, but she now apparently questions whether or not she consented."

"As soon as Jim learned of this, he spoke to, and cooperated with, the authorities. Jim also voluntarily took and passed a polygraph test, but, to our knowledge, she did not. Efforts to get additional information have been hindered by the accuser's demands that an investigator not

contact other persons who have knowledge of that night's events."

The NFL declined to comment on Druckenmiller's situation, but the league will be heard when Druckenmiller is arraigned. According to the NFL's "violent crime policy," Druckenmiller is required to undergo a "mandatory clinical evaluation and appropriate counseling" once he is formally charged. The evaluation and counseling must be performed under the direction and supervision of the league's vice president of player and employee development. Failure to comply will be considered conduct detrimental to the league and is punishable by a fine or suspension.

The league's policy cites several examples of violent crimes, including

"any crime involving the use or threat of physical violence to a person or persons." Druckenmiller met Thursday with 49ers Coach Steve Mariucci, a meeting Druckenmiller called himself, and the quarterback informed him of the situation.

"When he visited with me he was shaken, shocked and surprised," Mariucci said. "But he informed me and explained it as best he could. That's not easy for anybody, but he feels confident the legal process will take care of itself." Druckenmiller, who has been criticized publicly by General Manager Bill Walsh, said teammates were "supportive and confident" and indicated he felt "confident" in his situation.

"We'll let the legal system progress

as it normally would, keep our business on the football field and evaluate him accordingly," Mariucci said. Montgomery County prosecutor Peggy Frank told the Associated Press that Druckenmiller's lawyers assured prosecutors he will surrender to authorities by Wednesday. Druckenmiller declined to comment, but Mariucci said Druckenmiller is expected to be with the 49ers through their weekend camp, which concludes Sunday. "Despite the obvious anguish caused by the false charges, Jim is confident and finds some comfort in knowing that he will be fully vindicated," Neufeld said.

Swarm dorm gets all A's in bees

By Jennifer Rothacker
Knight-Ridder Newspapers

CHARLOTTE, N.C. - Some college roommates are messy. Others play their music too loud. But UNC Charlotte junior Kevin Moore has quite the tale of roommate woe: tens of thousands of swarming, stinging bees.

Honeybees, perhaps as many as 40,000, have built an empire between the outer brick wall of Pine Hall, an apartment-style dorm housing 84 students, and the inner cinder block

wall. It's believed their honeycomb stretches the entire height of the three-story building, with the bees gaining access through tiny slits created to help the building breathe.

"It's like a Stephen King novel," said Jacklyn Simpson, a UNCC associate vice chancellor and director of housing. They fly in frantic circles above Moore's balcony. Their synchronized buzzing is so loud at times, Moore has to shut the windows. Dead bees are scattered on his carpet. One he managed to swat is still stuck to a sliding glass door.

When it was "just one or two, we would swat them," Moore said. "I'm not about to swat at 30 bees. I'm not an idiot." The bees have annoyed students all year. A few have felt their wrath: Senior David Rittenhouse of Hickory was recently stung three times, twice on his head, once on his hand, after coming into his apartment after a jog.

The annoyance turned creepy last week, when thousands of bees came out of their hive and clung to one of the dorm's outer brick walls, a huge, black, throbbing blanket. A few

students said they couldn't get to class, said they were being held hostage," Simpson said.

University officials didn't want to kill the insects, since honeybees across the nation are under siege from mites, and their population is dwindling rapidly. But there was no way they could be taken out alive without destroying the wall. "You cannot get bees to abandon their nest," explained Stan Schneider, a UNCC biology professor who studies honeybee behavior and estimated the wall might house as many as 40,000.

He said bees are attracted to tight spaces like the dorm building wall because they can more easily guard their hive.

So early Monday, after removing 24 students from six apartments, Steritech Pest Elimination of Charlotte sent a crew clad in protective uniforms to spray a synthetic insecticide into the holes. "It was save the bees or save the students," Simpson said. "We decided on the students."

Some of the slits were barricaded with small strips of screening to

prevent re-entry. Still, bees hover around Moore's balcony, trying to find new ways into their expansive home. Eventually, Simpson anticipates the bees will leave when they realize their home is coated in poison. But that won't be the last trace of them. "Now what we're all waiting to see is how big the honeycomb is and how much honey is in it," Simpson said. "When it gets hot, it will melt."

GOP lawmakers seek increase in Pell Grants, federal aid

By Christine Tatum
College Press Exchange

WASHINGTON (CPX) - House Republicans are floating a plan to increase federal grants to college students from low-income families that could score the GOP major brownie points with a young voting bloc that typically aligns itself with the Democratic party.

The GOP's \$1 billion plan would add \$400 to the \$3,125 maximum a student can get each year under the government's Pell Grant program and is expected to be one of the driving forces behind this year's debate over how to fund education in fiscal 2000.

The Clinton administration has proposed a plan of its own, one that would add a lesser amount, \$125, to the grant maximum. Other increases proposed by President Clinton, of 50 percent or more in some categories, are mostly for teacher training, aid to colleges in predominantly Hispanic communities and GEAR UP, a new college preparation program.

Over the last few months, college lobbyists and student activists have blasted the White House for its lackluster support for several core student-aid programs. They're quick to point out that the Pell Grant's

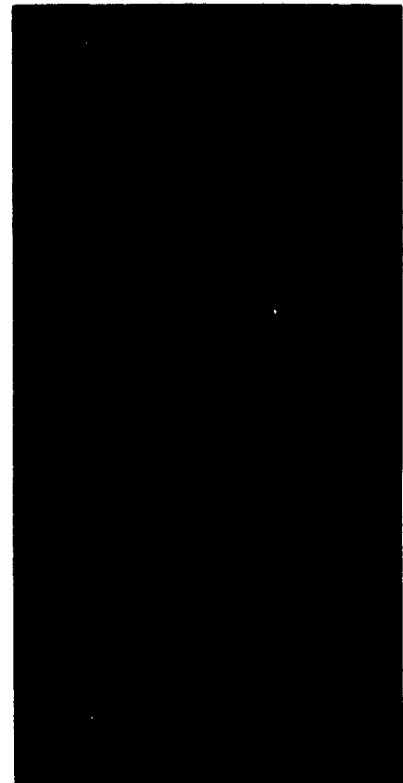
spending power has dropped dramatically over the past two decades. According to the American Student Association, the maximum Pell Grant would have to be raised to \$6,000 to match the coverage it afforded students in 1980. Today, the association also notes, the average student graduates \$12,063 in debt.

"The President says he wants to make vital investments in a time of prosperity," said Anthony Samu, president of the USSA. "Is there any better investment than making college truly available for all those who wish to obtain a college degree?" Republicans are seizing the opportunity to win over students concerned about their pocketbooks and to take a swipe at Clinton at the same time. Their plan meets the \$400 grant increase college lobbyists pushed for after getting a look at the White House's proposal a few months ago.

"The president once again has listened to his pollsters," said Rep. Bill Goodling, a Pennsylvania Republican who serves as chairman of the House Education and Workforce Committee. "He is meeting his political needs, not the real needs of students and educators." Goodling also criticized the President

for favoring new programs rather than supporting those that are "tried and true."

The White House is battling back with claims that the GOP is trying to lure young voters with a plan that pits higher education against programs designed to support school children and prepare them for college.



Document reveals Western Kentucky's delay in acting against accused harasser

College Press Exchange

BOWLING GREEN, Ky. (CPX) - Officials at Western Kentucky University are running for cover in light of a recently publicized bombshell of a report detailing numerous accusations of sexual harassment lodged against a former administrator by female students and employees.

A local newspaper, "The Park City Daily News," obtained a copy of the 340-page internal report, which concluded that C. Wayne Jones, director of the university's Glasgow campus, had been sexually harassing female students and employees for years. The report also concluded that the university's efforts to reprimand Jones weren't strong enough to prevent him from repeating the objectionable behavior.

Though only four women filed formal complaints about Jones, an affirmative-action officer who testified before internal investigators said that if she had tallied all of the calls she had received from women complaining about Jones, there would have been at least 50. The Daily News also reported that Western Kentucky pressured Jones to resign after one of the women challenged the school's

reprimand and appealed to the university's president, Gary A. Ransdall, for help.

An internal appellate committee charged with hearing the woman's grievance ruled in her favor. The committee's report stated that several complainants had been ill advised by university officials, that administrators had interfered with the initial investigations into Jones' behavior, that appropriate punishments had been ignored and that no one monitored Jones after his reprimand.

The report also stated that university officials waited too long before looking into the women's allegations against Jones. The first harassment complaint against him was made in 1996, but the university waited until 1998 to investigate. Efforts to reach Jones were unsuccessful. The report also stated that Jones said he was a "toucher" and a "hugger" who often made contact with students "to boost their self esteem" and to let them know they were appreciated.

Pitt students hold hunger strike over denial of benefits for gay partners

College Press Exchange

PITTSBURGH, Pa. (CPX) - Two students at the University of Pittsburgh have been on a hunger strike for a week to protest school policies prohibiting the extension of medical benefits to the domestic partners of gay and lesbian employees.

The protesters, members of an organization calling itself the Equal Rights Alliance, said they would continue the strike until the university's board of trustees agreed to meet with them to discuss the issue. School officials say it's a meeting that's not likely to happen.

The group claims the university is violating a 1990 city ordinance that bars employment discrimination based on sexual orientation. But school officials say those claims have no basis, maintaining that state law doesn't require the university to provide such benefits. To bolster their argument they're quick to note that other state institutions do not cover same-sex partners in their health plans either.