NEWS thursday, 25 january, 2007

Employment Opportunity students, union elections

POLL CLERKS (150)

- Work part-time on voting days (March 7&8, March 22&23)
- Set up, supervise, and take down polling stations
- Wage: \$8.00/hour, Paid Training
- Work around your class schedule

APPLICATION DEADLINE: February 2, 2007 @ 17:00

APPLY ONLINE at www.su.ualberta.ca/vote

Lessons from Hatred

Date:

February 1, 2007

Time:

5:00-7:00pm

Place:

UofA Campus

ETLC-E001

Genocide: Beyond Terror

Systematic Mass Destruction

XX Hillel: Jewish Students Association XX

Holocaust and

Human Rights:

Rwandan Genocide

Survivor:

History and First Hand

Testimony

Comp Sci showcases servos, Segways

KILROY WAS HERE Along with robotic scorpions, metallic dogs and a mobile vending machine. Batteries not included.

EDMON ROTEA

News Staff

In an effort to pique interest and boost enrolment, the Department of Computing Science opened its doors last Friday and pulled out all the stops to showcase the cool side of being

During the fact-finding tour, staff, students and researchers of the department explained their latest research efforts while describing emerging applications of computer technology.

"We're looking at data in new ways and trying to make sense of that. As you know there's a lot of data out there, from credit card companies to medical data—by the terabytes—and all sorts of stuff," said David Woloschuk, a senior programmer analyst for the Alberta Ingenuity Centre for Machine Learning (AICML).

The AICML, located within Computing Science Centre, is a hub for research in the fields of curiosity-driven machine learning, and a variety of emerging commercial applications from bioinformatics to entertainment.

Visitors interacted with teaching tools used in the classroom, including interactive toys, from bionic canines to a robotic Lego Mindstorm scorpion used as a teaching tool for fourth-year undergraduate students.

"The scorpion has a sonar system, so if you get too close to it, it backs away," Woloschuk said as he approached an artificial scorpion that quickly backed away and delivered a virtual sting. However, the Mindstorms aren't only used for fun and games.

"The Lego Mindstorms are rela-

tively inexpensive compared to other robot kits out there. It's very easy to write initial programs for them, so if you are just teaching someone programming, it's actually very easy to do," said Woloschuk, who added that the models have other practical applications, including having students teach the robots to follow and track movement.

Additional robotic teaching toys included robotic dogs made by Sony, which like conventional canines have the ability to learn new tricks, from learning about new environments to walking faster. Visitors had the chance to even play a round of soccer with the dogs.

Other research efforts included image-based rendering techniques, whereby three-dimensional computer models could be generated from video footage creating a scene akin to those found in films like *The Matrix*.

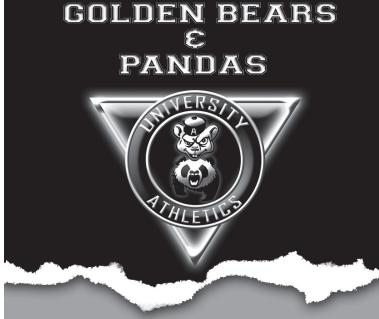
"Now we can give the viewer the freedom to choose their viewpoint by using a mouse or keyboard," said PhD candidate Cheng Lei, as he rotated a three-dimensional scene of hiphop break dancers—originally generated from a composite of two-dimensional video footage. "All the videos are captured by multiple cameras—but you cannot afford to use so many cameras to cover all the possible viewpoints, so we had to use a

technique to 'synthesize' the view-points not captured by real cameras."

Further projects showcased on the tour included holographic three-dimensional models, educational teaching games, and web-based multimedia learning tools. Graduate students also showed off their latest creations, including a robot nicknamed "Kato" which was built using a Segway scooter to a robot that could be potentially used as a mobile vending machine.

"This is in fact a mobile robot that distributes candy. The objective is to test sequential decision-making. It tries to learn where to go and at what time to give candies in the shortest amount of time," said Adam Milstein, a graduate student specializing in artificial intelligence. "The applications of this robot is not only limited to a mobile vending machine. Other applications include anything involving decisions on whether to explore some new area or exploit the information you already know."





U of A Basketball vs Saskatchewan

Friday & Saturday, January 26 & 27 Pandas – 6:00pm • Golden Bears – 8:00pm Main Gym

Pandas Hockey vs. Lethbridge Friday & Saturday, January 26 & 27 7:00pm @ Clare Drake Arena

Golden Bears Volleyball vs. UBC Saturday & Sunday, January 27 & 28 2:00pm @ Main Gym

Your university • Your TEAMS • Your SEAT IS READY 492-BEAR / 451-8000 www.bears.ualberta.ca

NEWS IN

Compiled by Thomas Wagner

ALBERTANS SHOULD HAVE NO BEEF WITH EQUALIZATION, SAYS BOOTHE

In the first few weeks of the year, Alberta has again made the news, this time over controversial statements by Minister of Sustainable Resource Development Ted Morton and Minister of International, Intergovernmental and Aboriginal Relations Guy Boutilier.

Both Conservative members spoke on issues of national unity and fiscal imbalance between provinces, all complaints which Paul Boothe, an economics professor at the University of Alberta, said the region has little right to make.

Nonetheless, on the CBC show *The Current* Morton had said Alberta receives

far less in services from the federal government than it pays taxes for.

"Since 1961, there's been \$220 billion net transferred out of Alberta to the rest of the provinces," Morton said. "Coincidentally, during the same period Québec just happened to get \$211 billion net transferred in. Go figure."

However, Boothe said that the money paid out isn't from the Alberta government, but from federally collected income tax and the GST. As well, the figured doesn't factor in that some money is spent on federal programs, such as paying down the national debt or on defence, both of which aren't factored into the equation but are considered a benefit to all Albertans.

"Of course we don't get equalization, but that's because we're rich," Boothe said. "We could get it if we were poor, but who wants to qualify?"

Boothealso explained that despite popular belief, Alberta benefits greatly from its involvement in Confederation, both economically and socially. Movement of workers and people across the country is extremely easy, bringing great economic benefits, not to mention the positive effects that inter-provincial trade and commerce have on the Albertan economy, as well as the response to Canadian products.

"When we do export [products], having the Canada brand is pretty important and a lot more people, potential customers in the world, have heard of Canada than have heard of Alberta," Boothe said.

Boothe also worried about the priorities of the government, noting that Alberta has more serious issues to deal with, like an overheated economy or unsustainable government spending, than national issues it has no control over.

"We have a lot of problems in Alberta right now ... that we need to deal with at home, instead of commenting on issues that don't really have any major effect here in Alberta," he said.