



McGill

C e n t r e f o r

Intelligent Machines

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Newsletter

Starting your own business

Mark Hollingworth, Office of Industrial Relations, Faculty of Engineering, has been approached by a group from Ecole des Hautes Etudes Commerciales (HEC) who would like to give a six hour interactive seminar at McGill on how to set up your own business by spinning off technologies that have been developed here.

The course would be open to professors and graduate students free of charge. Please let Janet, <jmb>, know if you would be interested in attending. If sufficient people respond, the session will be organized within the next couple of months. Although the sessions have been prepared in French, a bilingual version will be presented at McGill.



Open House update

The second CIM Open House meeting took place on Wednesday, February 14 in the presence of 17 enthusiastic CIM volunteers. Janet updated the attendees on the latest University and Faculty plans for this three-day event that will take place Sept. 20 - 22. A lively discussion followed on the Centre's plans and proposals for participation in the Engineering Tent located on Main Street as well as demos which will be given in our labs. The most difficult problem was to come up with titles and descriptions which are very simple and catchy, and

geared for the general public rather than for engineers. As a result of this meeting and further consultation with the profs, the following list of posters, videos and demos was submitted this week to the Open House Committee for publication in the McGill information pamphlet.

The booth in the tent will include one demo, two posters and four videos. The title of the demo will be **Seeing Robots** and will feature the smaller MRL robot with a moveable video camera observing its surroundings. The two posters entitled **Through the Eyes of a Machine** and **CIM Robots in Action** will show real world application of computer vision, and photos of the Centre, people and robots, respectively. The videos which will be available are: **Robots on the Move!** showing current research in robotic sensing and navigation; **Curious Robots Explore the World**; **Accurate Robots in Action** featuring two robots, designed and built at CIM; and **Virtual Reality with the Sense of Touch** featuring the Pantograph.

People whose curiosity has been aroused by these presentations will then be invited to tour the labs on the fourth floor at scheduled times to see (and experience) the following demos. **See SPOTT Move** (SPOTT is a distributed robot control architecture which executes on a collection of 10 to 15 computers and communicates to the autonomous mobile robot via a radio link. The environment is sensed by the following collection of sensors on board the robot: sonar, laser, bumper, infrared and compass. SPOTT intelligently and dynamically adapts to its discovered surroundings in order to control the robot to successfully complete a task.) **Famous Faces: A Case of Mistaken Identity?** (The computer will try to match the visitors' facial features to those in a database of faces of famous people.) And finally, **Street Motion** (A video camera connected to a computer that tracks the motion of people or cars on University Street.)

In the Robotic Mechanical Systems Laboratory, **Virtual Reality with the Sense of Touch** will feature the Pantograph and how it is used.

In the Artificial Perception Laboratory, visitors will be able to take home a picture of their hand as seen by the computer when they participate in the demo entitled **Hands on the Computer: Laser Scanner Technology**. As well, **These Eyes are Watching You!** will feature an artificial head which will be watching every move the visitors make.

Meanwhile in the Speech Laboratory a demo entitled **Talking to Computers** will allow the visitors to see (or hear!) what's new in computer speech recognition.

This does not mean that the work is over for now. We still have to organize the program, publish our own information brochure and find lots of volunteers to man the booth, guide visitors and help with the demos. Your input is always welcome. Please feel free to contact Janet at <jmb> if you can help and don't forget to attend the monthly CIM Open House Meetings as announced on the motd.

Note: There will be a review of the Open House activities in the Shatner Building on March 18th at 5:00 led by Avi Friedman. All those who are interested are invited to attend.

NEWS AND EVENTS

Hats off to ...

CIM will be well represented at the upcoming ECCV (4th European Conference on Computer Vision) that will be held in Cambridge, England from April 14-18. **Tal Arbel** will be presenting a poster entitled: *Informative Views and Sequential Recognition*. **James Elder** will be giving two oral presentations entitled *Local Scale Control for Edge Detection* and *Blur Estimation and Computing Contour Closure*. **Nigel Ayoung-Chee's** paper *Enhanced 3D Representation Using Multiple Models* was accepted for presentation at one of the two workshops at the conference (The International Workshop on Object Representation for Computer Vision).

John Zelek will be presenting the paper *SPOTT: A Mobile Robot Control Architecture for Unknown or Partially Known Environments* which he co-authored with Prof. M.D. Levine at the AAAI Spring Symposium on *Planning with Incomplete Information for Robot Problems* to be held at Stanford University from March 25 to 27, 1996.

A robot in the news: A camera crew stopped by the **Mobile Robotics lab (MRL)** on March 4th. CBC is currently doing a news series about computers in the workplace, and so the Centre for Intelligent Machines fit the bill. Looking for people who wanted to avoid their research, they gathered a crowd to sing a ragged but spirited bowdlerization of the Sound of Music hit *These are a few of my technical things*. This is the age of the information superhighway after all, so bright copper kettles and warm woolen mittens have been replaced by virus-free downloads. Meanwhile, in the foreground, the Nomadic robot spun merrily. Look for **Prof. Greg Dudek** and the Half-tones, and listen for their melodious voices, on Newsbeat, Ch. 6, March 6th or 7th, and possibly on National TV - assuming it's a slow news week - on Monday, March 11th.

Good-bye to ...

Simon Lacroix sent us the following message last week: "As you read these lines, I am already installed in LAAS/CNRS (Toulouse, France), surrounded by dumb robots that systematically refuse to obey their programs... I had to leave CIM in a big hurry (it was Friday the 9th of February, and my job at LAAS began the 1st of February...), and could not even say good-bye to everyone!

I say hello (and thank you) to all the people at CIM, and especially those in the MRL, with a special thought for Greg who gave me some of his precious time during the year. This Post-Doctoral fellowship has been wonderful for me: I really appreciated the atmosphere at CIM, and Montréal is a very exciting city... So exciting, that I actually left CIM without having completed any serious work! Fortunately, this gives me an occasion to

continue a (hopefully fruitful) collaboration with Greg, so that I will probably have the chance to pass by CIM in the future. Good luck to everyone! I can be reached at <simon@laas.fr>"

Articles & ideas are welcome. Please send them by e-mail to the editor. Deadline for publication is the 5th of every month.

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CIM Horoscope for Feb 19-Mar 2

As February wound into March, it looked as if winter was over, but not so. And it is the same with this month's sign of the zodiac...



Pisces

Long walks on the beach. Romance. Seafood! Fun, huh? The melting snows filling lakes and rivers fill your heart with joy, for spring is coming. And yet, it's not enough. For you, trapped in the aquarium that is your life and work, spring is just a lesser wind chill in the lab.

Jojo Cimvarrd

GUEST TOP TEN LIST

Top Ten really dumb things I've done since I left CIM four months ago...

- ⑩ Fought off a black belt attacker by delivering a vicious blow to his foot with my ribs.
- ⑨ Used my skull to break the fall of a glass ceiling-light fixture.
- ⑧ Wondered why my vision was so hazy one morning only to discover that both my contact lenses were in the same eye.

⑦ Discovered the hard way that mouse traps are for mice, not my bare feet.

⑥ Misinterpreted recipe instructions of "bake for 15-18 minutes" as "put into oven, forget about it, come back 2 hours later and scrape the carbon off your oven tray".

⑤ Forgot that manufacturers put lids on kitchen blenders for a reason.

④ Figured Stephen Benoit would have given up on processed cheese sandwiches by now.

③ Actually considered buying a home computer just so I could spend a couple hours installing LINUX.

② Supposed my new employers would be receptive to the idea of a monthly top ten list.

① Thought I could live without Matlab.

Submitted by Paul Mackenzie

