



McGill

C e n t r e f o r

Intelligent Machines

Volume 8, Number 6,

June, 1994

Newsletter

CIMBIZ '94 UPDATE

On May 18 a group of about 60 curious, enthusiastic, potential entrepreneurs from CIM met for an all day information seminar on what it means to start and run your own business. Judging by the size and response of the audience at the end of the day, the participants were more than satisfied by this experience.

The seven speakers covered a wide range of topics which helped to demystify the idea of entrepreneurship and opened a window on the business world: the harsh reality of bankers, investment, patents, responsibility, competition and failure. But also the personal satisfaction of trial and error, of challenge, and of success. By five o'clock heads were reeling and many were hungry for still more information on the subject but on the other hand many questions had been answered and much interest sparked. Numerous requests for a follow-up seminar have already been made.

This enthusiastic response on the part of both audience and speakers was a well-earned reward for Janet Burghardt who spent untold hours organizing what we hope will be the first of an annual event.

To sum up the day very briefly, the session opened with Mr. Ian McLachlin, Engineer and Consultant now teaching at the Dobson Center for Entrepreneurial Studies at McGill. His presentation dealt mostly with the importance of a proper "Business Plan"; a topic on which the closing speaker, former CIM graduate turned entrepreneur, **Anthony Topper**, President of Robosoft, very elaborately expounded based on his own experiences.

The financial do's and don'ts were presented by three different speakers. **Mr. Steven Oliver**, from the Business Development Bank explained the different sources of funding. **Mr. Yan Barcalo**, a venture capital specialist from Technocap Inc., was adamant in stressing the importance of using the Internet system to get a feel of the market and his company's role in financing high-tech businesses. Thirdly, extensive consulting experience is what allows **Mr. Hung Vu** of Inno-Centre to assist high-tech companies in management, organization and research.

A particularly relevant and animated presentation was made by **Patrick Kierans**, Engineer and Lawyer, specialist in patents and intellectual property, a subject of particular interest to all students at CIM who are developing new software. Finally, all the previous presentations were summed up by another former CIM graduate, **André Sokalski** through his personal experiences as co-owner of a very successful company, Mayan Automation Inc.

The handouts from the seminar presentations are still available in room 410 to anyone who is interested and was unable to attend. There is also a video of the seminar available for anyone interested in borrowing it.

Many thanks to all who participated.
Submitted by Kathleen VanderNoot

HOLIDAY CLOSURES

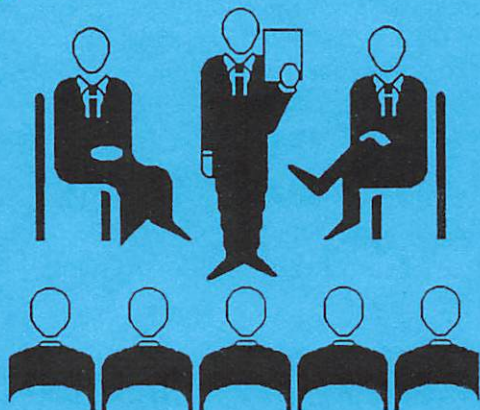
The CIM offices and all McGill University offices will be closed for the St-Jean-Baptiste Holiday on Friday June 24 and for Canada Day on Friday July 1. The University will also be closed on Monday, June 27 and Monday, July 1, but the CIM offices will remain open.

CIM SAFETY COMMITTEE

The CIM safety committee is finalizing some safety guidelines which will be posted in each lab. Please take a moment to read them so we'll all know what procedures to follow in the event of a fire or other emergency. Thank you to the members of the committee for taking the time to do this, to Kathleen for preparing the text, and to all of you for your cooperation.

IRIS CONFERENCE REMINDER

The 4th annual IRIS/Precarn conference takes place on June 20-23rd inclusive in Toronto. (The conference was described in detail in February's newsletter). There will be several participants from CIM who will be attending and presenting demos.



CIM IN THE NEWS

A camera crew from the French section of TV Ontario came to film at CIM on Friday May 27. They took shots of a speech recognition application in the Speech Lab of Renato De Mori. The application involved a continuous speech recognition system developed at McGill which will also serve as a recognition tool for the development of voice applications for space. The demo was kindly provided by Charles Snow.

Then the crew interviewed Vincent Hayward and filmed his various hand controller prototypes in the Robotics Lab. Some of these prototypes are being considered as integrated interfaces for the development of advanced robotics control for space.

The TVO footage will be edited and included in a 15-minute educational documentary on the ground activities of a Canadian Astronaut. The crew had filmed Julie Payette's training activities at the Canadian Space Agency two days earlier and were interested in documenting her research further by visiting CIM.

Submitted by Julie Payette

NEWS AND EVENTS

☛ Former CIM graduate, Dr. Lee Iverson, has been awarded the D.W. Ambridge Award for the most outstanding McGill graduate receiving the degree of Ph.D. in the Physical Sciences or Engineering in 1993-94. This award is made in recognition of his splendid academic record, the excellence of his thesis and the significance of his research. The award consists of a cash award of \$1500 and an engraved plaque. Dr. Iverson did his research under the supervision of Prof. Zucker. Congratulations, Lee !!!

☛ Mark C. Readman, also a former CIM graduate, has just published *Flexible Joint Robots*. This is the first book to consider the myriad problems and potential solutions that affect flexible joint robot design. It covers fundamental concepts, including joint torque feedback control laws, acceleration feedback and adaptive control laws. The book presents a dynamic model of a flexible joint robot in several coordinate systems and includes an analysis of the fast dynamics. It is published by CRC Press, catalog no. 2601SR, March 1994, ISBN: 0-8493-2601-X.

☛ The "1994" Study-Tour Award for Outstanding Foreign Students of the Japanese Language" has been awarded by the Japan

Fundamental Japanese Language Institute to Robert Wodnicki. Robert left for a three week visit of Japan on June 6th. Congratulations Robert !!!!!

☛ Paul Charette, a student of Prof Hunter, has submitted his Ph.D. thesis entitled 'A Method for Full-Field Mechanical Testing of Biological Membranes Based on Electronic Speckle Pattern Interferometry (ESPI)'. He will be going to the University of Auckland next month as a post-doc.

Good-bye To

☛ Next on the list of CIM emigrants is Paul Dobrovolsky who is leaving us this month on a well earned tour of Europe before joining the forces of BNR in Ottawa. All the very best, Paul! We will certainly miss all your assistance around the Centre including your contributions to this Newsletter.

CIM VIDEO LIBRARY

I received an excellent suggestion from Jonas August that we organize a CIM video library. This library would include videos of demos and seminars (such as the recent CIMBIZ seminar), and the CIM video. This could provide access to demos for CIM members at times other than normal working hours. I would appreciate it if any volunteers who would like to help me organize the video library would contact me at jmb@cim.mcgill.ca. I will need at least one person who knows how to use the video camera, and, of course, people who are willing to do the demos. If anyone has videos of demos, please let me know and we'll make a copy for our library. I think this will be a fun project with no real deadlines, so I'm hoping many of you will get involved and help us make our library complete! Thank you!

BATTER UP !!

Here is the CIMbernetics game schedule; PLEASE come out & support us on the reservoir field....

Fri, June 10 Mon, July 4 Mon, July 11

Fri, July 15 Mon, Aug. 1

For more info see our co-captains Paul Mackenzie & Paul Dobrovolsky.

CIM TOP TEN

From the home laboratory in room 418:

Top Ten ways to impress attendees at the upcoming IRIS/PRECARN conference:

⑩ Tell them your robot uses day-old coffee for fuel.

⑨ Tape a full-size cardboard picture of Arnold Schwarzenegger's biceps to a robot arm and make it flex.

⑧ Have your camera scan some industrial tycoon's face, then make the camera shake violently and stop, telling him the image of his face killed it.

⑦ Have your demo endorsed by Michael Jordan.

⑥ When your human-like vision system crashes during a demo, tell onlookers the problem is that it looked at last month's solar eclipse without a filter.

⑤ Program your mobile robot to wheel around and destroy all other demos so yours will be the center of attention.

④ Emphasize user-friendliness with: "This system is so easy to use, even a complete idiot could use it. Would you like to try?"

③ Add a few 'extra' capabilities to your system to reach the average consumer: for example, "This system can perform real-time tracking of moving and flexible objects in a dynamic environment, and can also make one hell of a good pizza crust."

② Dress up as a Klingon from Star Trek to highlight your intelligent system's feasibility for space applications.

① Illustrate the functionality of your research with shadow puppets.

Submitted by Paul Mackenzie