



McGill

C e n t r e f o r

Intelligent Machines

CIMBIZ 94

HAVE YOU EVER CONSIDERED STARTING YOUR OWN BUSINESS ?

Don't forget to register for our first CIM business seminar taking place May 18.

When: Wed, May 18, 1994 ,9:00 - 5:00

Where: Samuel Bronfman Bldg, Rm 301

Learn - how to develop a business plan

- the sources of financing for start up companies

- the criteria used by venture capitalists when evaluating proposals

- how to obtain investment for your new business

- information on patents

Hear cases of successful businesses started by our own former CIM graduates !

Speakers:

Ian McLachlin, Consultant, Dobson Centre for Entrepreneurial Studies, McGill.

Steven Oliver, Account Manager, Federal Business Development Bank.

Patrick E. Kierans, Lawyer specialising in Patents, Trademarks & Intellectual properties, Ogilvy Renault.

Yan Barcalo, Venture capital specialist, Technocap Inc.

Hung Vu, Corporate development counsellor, Inno-Centre.

Anthony Topper, President, Robosoft Corp.

André Sokalski, Mayan Automation Inc.

PLEASE REGISTER OUTSIDE RM 410 (CIM
OFFICE)

If anyone would like to volunteer to produce a short write-up of the seminar for the next newsletter, please let me know (jmb@cim.mcgill.ca)

Volume 8, Number 5,

May, 1994

Newsletter

BATTER UP !!

The CIM softball team, the CIMbernetics, will be out playing on the reservoir this summer. The team co-captains are Paul Dobrovolsky and Paul Mackenzie and the aim is to have fun and catch some sun. If anyone is still interested in playing (especially female players since it is a co-ed team) contact mackenzi. Although this non-competitive league is sponsored by Thompson House and the Post-Graduate Student Society, everyone is welcome to join.



CIMbernetics RULE !!!

VICTORIA DAY

Just a reminder, Monday, May 23 is a statutory holiday, Victoria Day.

CIM SAFETY COMMITTEE

The Environmental Safety Office would like to remind you that accidents and dangerous incidents, no matter how small, as well as occupational diseases must be reported to our office as required by University policy. Noted in section D-3 of the Administrative handbook, the immediate supervisor or supervisor's delegate should complete an Accident/Incident/ Occupational Disease Form and forward it to the Environmental Safety Office by fax (8047) or mail within 24 hours of the incident.

A copy of this form is available from the members of the CIM Safety Committee (Diego Camelo-Duque, Profs. Buehler & Michalska) as well as the Manager.

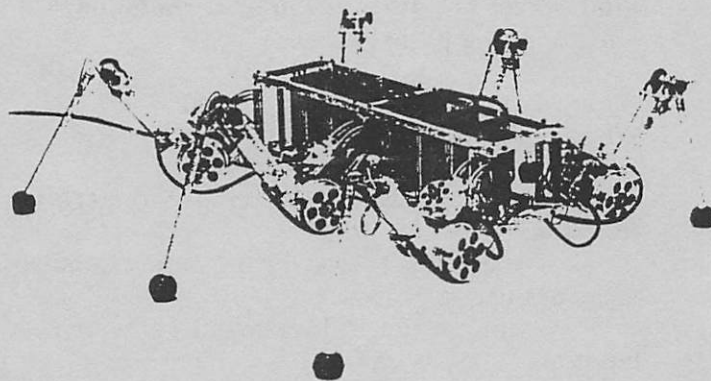
NEWS FROM MUNICH

The joint operation of robotics and cybernetics research has lead to the development of a walking robot with learning capabilities. Based on the results of biocyberneticist Prof. H. Cruse (University of Bielefeld), who has been studying the locomotion of stick insects for years, Prof. F. Pfeiffer from the Technical University of Munich has designed a walking robot on the model of nature. The robot has six identical legs, each consisting of three joints with indirect drives, multiple sensors and a single processor. The decentralized control concept found in nature is realized by the programming of neural networks so that the gait results from the combined action of the six individual leg systems. In the present stage the robot is able to walk straight and overcome obstacles.

Thanks to a \$1M CAN research award, Prof. Pfeiffer has been able to expand the project by the cooperation of neurobiologist Prof. F. Clerac (Marseille) and robotics researcher Prof. F.

Chernousko (Moscow). Within the next four years they want to develop another six-legged walking machine with intelligent locomotion control that is able to inspect uneven and cornered underground canals.

Submitted by Wolfgang Seyffert



NEWS AND EVENTS

NSERC Postgraduate Scholarships Competition Results: Five of the nine recipients in Electrical Engineering are members of CIM. Our warmest congratulations to John Lloyd (Postdoc Fellowship), Vivian Zia (PGS A) and Taly Arbel, Michel Doyon and Mourad El-Gamal (all PGS B).

Prof. R. DeMori will be taking over the responsibility of organizing the Beatty Lectures for CIM.

Good-bye To

On April 19 CIM said goodbye to Prof. Ian Hunter who has left his position at McGill to join MIT in Cambridge. Dr. Hunter first came to McGill

from New Zealand as a Postdoc Fellow in 1980. Over the years he was associated with Electrical and Biomedical Engineering as well as the Dept. of Physiology and the School of Physical & Occupational Therapy. Since 1990 he was Associate Professor in Biomedical Engineering and a member CIM. We wish him all the best!

☞ Unfortunately CIM will also be saying good-bye to Carlos Perez who has worked as CIM's System Administrator for the past 3 years. Carlos has accepted a position at M3I in Longueuil. We will miss him. I am happy to report that we will be left in the competent hands of Jan Binder, who will take on Carlos' responsibilities at CIM. We wish them both the best of luck and success.

☞ Karim Shafik is leaving us for UNISYS-PARAMAX here in Montreal. What will he be doing there? He was quoted as saying, "I don't know what I will do without my friends. I believe that by the time I will leave UNISYS there won't be a stiff left in the place but there will be a whole lot of chiefs." Good luck Chief!

☞ We also want to wish all the best to Xianze Chen who has just gone to MPB in Montreal to design robot arms and also to Duncan Baird who not only just handed in his Master's thesis but decided that he had commuted between Ottawa & Montreal long enough. He has joined the BNR team in Ottawa.

☞ Paul MacKenzie submitted his thesis entitled "Mobile Robot Localisation Using Model Based Maps" which in turn lead to his presentation called "Precise Positioning Using Model-Based Maps" at the San Diego IEEE Robotics & Automation Conference.

WELCOME TO the following people:

As some people move on others move in: Room 445 has two new occupants. Dr. Zhang Jiyan is a

Postdoc Fellow from Nanjing University of Science & Technology. He is a specialist in spatial kinematic chains & design optimization and will be working with Prof. Angeles' robotic mechanical systems group for the next six months. Also visiting for several months is Dr. Rosario Sinatra (no, he doesn't sing!) who is here from Sicily to work with Prof. Zsombor-Murray.

CIM TOP TEN

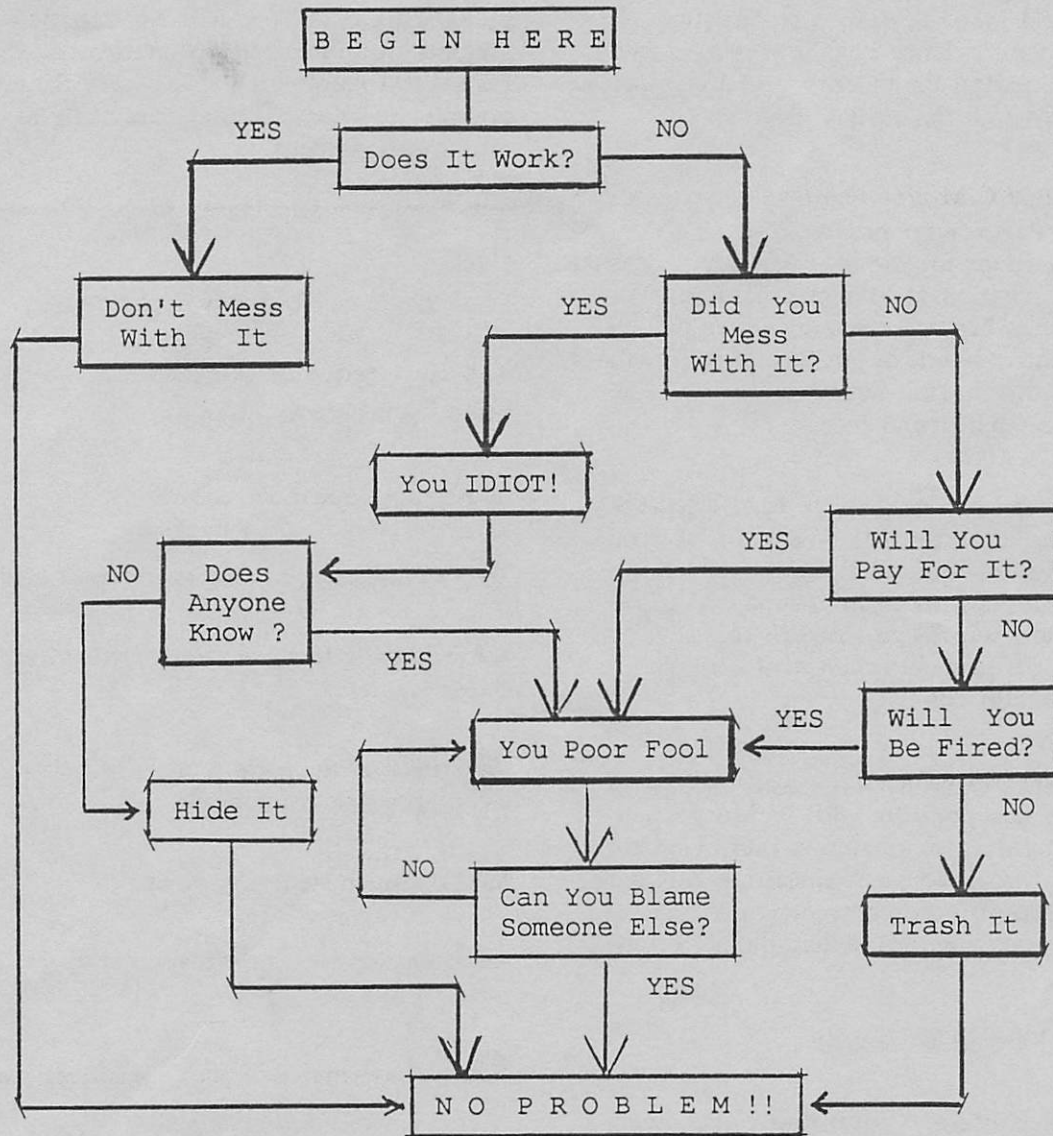
From the home laboratory in room 418:

Top Ten reasons why so many CIM staff have been leaving lately:

- ⑩ No more free robot rides
- ⑨ All those tempting job openings at McDonald's
- ⑧ Fed up with nosy roving robots with remote control cameras
- ⑦ Grief over the ending of the Star Trek: The Next Generation television series
- ⑥ Too much static electricity
- ⑤ Demands for a beer dispenser in the lounge not met
- ④ Too few women on the CIM softball team
- ③ Low variety of laser-scanable toys in the vision lab
- ② Run-in's with hard-line Internet police
- ① Two words: demo overload

Submitted by Paul Mackenzie

PROBLEM SOLVING FLOWCHART



Submitted by K. Sandrasegaran (with permission
from the author)