



McGill

C e n t r e f o r

Intelligent Machines

Newsletter

Changes at the top

On June 7, Janet Burghardt, CIM's Manager for the last three years, resigned her position to take on a new challenge at Clinidata. However, CIM did not stay without a Manager for very long.

Since June 11, the position has been filled temporarily by Louise Cl  roux, a Ph.D. candidate of Universit   Laval. Louise conducted her doctoral research under Prof. Cl  ment Gosselin's supervision, himself a former CIM Ph.D. graduate. Her work focused on the static positioning accuracy of parallel manipulators of the platform type. Besides being fully bilingual, Louise is quite conversant in several computer languages and is pretty familiar with various kinds of hardware. I am confident that she will make an excellent contribution to CIM's work. Louise can be reached at <manager@cim>.



Welcome on board, Louise, and have an enjoyable experience at CIM.

Submitted by Jorge Angeles

POWER SHUTDOWN July 4 - 6

There will be no power in the McConnell Engineering Building between 10:00pm and 6:00am on July 4th and 5th, (Thursday & Friday), and between 8:00pm and midnight on Saturday, July 6th.

During this time access to CIM computer network will be available **only remotely**. All the computers, except those in the Computer Systems Room powered via UPS, will be down from 6:00pm on Thursday, July 4th to 12:00pm on Sunday, July 7th. The following services will be available via direct dialup to CIM or over the net during the shutdown: e-mail, WWW, ftp and access to home directories. Since the login servers 'Lightning' and 'Thunder' will have to be powered off, two computers 'Pontryagin' and 'Kolmogorov' will be relocated to the Computer Systems Room and will serve as the remote login servers.

Report on ACFAS

From May 13 to May 17, as a part of its 175th birthday party, McGill University played host to the 64th Congress of the *Association canadienne fran  aise pour l'avancement des sciences*. On May 13, a Symposium on Robotics was held, organized by CIM, under the sponsorship of the Canadian Space Agency. At this session, fifteen papers were presented, in French, by researchers from CIM, Laval University, France's INRIA, and the University of Montpellier. On May 15, two sections

in the general area of Electrical Engineering, one on robotics and one on computer vision, were organized under the ACFAS umbrella. The week of May 13 may well be remembered as the time during which more French than English was heard in the halls of McGill, and certainly in the McConnell Engineering Building, where the CIM-organized events were held. While francophone professors and students were at ease with their presentations, the event posed a major challenge to those who only seldom have the opportunity to give a presentation in French. I am happy to report that the latter did an excellent job of conveying their message to a mostly francophone audience.

If we consider that many CIM graduates will get a job in Quebec, opportunities like ACFAS symposia to exercise their French should be welcome by CIM students and as well by professors.

Submitted by Jorge Angeles

Summer activities ...

I wanted to wish you all a fabulous and fun summer enjoying Montreal's many festivals before I head off for what will hopefully be a fabulous and fun experience at this year's *Summer Session Program of the International Space University (ISU)* to be held in Vienna, Austria.

Since the program is so difficult to describe I'll quote here from the ISU literature: "The Summer Session Program is an intensive 10-week professional development program aimed at providing graduate students and professionals from around the world with a unique educational experience which provides an interdisciplinary, inter cultural and international perspective on the world's space activities."

During the first half of the session all students follow a core curriculum in the areas of: Space Mission Planning, Space Business and Management, Space Engineering, Space Life Sciences, Space Policy and Law, Space Resources, Robotics and Manufacturing, Satellite Applications, Space Physical Sciences, and finally, Space and Society.

During the second half of the session students choose from specialized lectures in the above departments.

At a recent briefing given by the Canadian Foundation for the International Space University (attended by none other than Louise Cl  roux an ISU alumni!) it was made clear that design projects, cultural nights, and many other ISU traditions would fill any semblance of free time. In fact, a popular alternative interpretation of the ISU acronym is apparently: Insufficient Sleep University! Oh well, I can't say I haven't been warned.



In case your travels take you to Vienna this summer and you would like a little guided tour or a coffee house recommendation please give me a call at the Hotel Academia (43 1) 401 76 77, or email me at the following address: Rey@isu96.event.tuwien.ac.at. If you want additional information on the ISU program you can consult the light blue poster on CIM's graduate students news bulletin board, or, you can ask Louise to tell you more.

See you in September, cheers!

Submitted by Daniel Rey

And on the local scene: Destination - Yamaska

On June 15th, CIM had its first BBQ outing trip. It was a great day which consisted of Friends, Sun,



Also, three prominent undergraduate CIM students received their Bachelors degrees: Tony Jebara, Eric DeSilva and Imad Kaderi.

Congratulations and best wishes to all of you.



For those of you who have not seen the summer issue of the **McGill News** ... the cover article features "Three Interesting Things about Electrical Engineering" and includes an interesting write-up and wonderful photo of two very busy CIM professors hard at work in the APLab. Copies are available from the Dean's office.



As presented in an article in our February Newsletter, sometimes a job offer is so enticing that it's worth the effort and hassle of pursuing degree and work simultaneously. Well, sometimes the job offer is SO enticing that it's worth putting off the degree for a while!! That's why **Julie Payette** has decided to put off her studies in order to fly off into space. The Canadian Space Agency announced on June 27, new Shuttle flight opportunities for three of its astronauts. Julie Payette and Steve MacLean have been selected for Mission Specialist training to begin in August, and Bjarni Tryggvason will fly on an upcoming mission as Payload Specialist.

Good bye to ...



Luc Joly, our visitor for the past year, returned to France on June 30, leaving us this message:

"I really enjoyed my stay at CIM. Despite the oil leaks and the sensor problems, I managed to do some interesting work on the Sarcos teleoperation system. The experiments I did showed how *virtual mechanisms* could be used to specify a complex behavior for the arms, and synthesize robust control laws.

The experimental part of my PhD is now finished. I'm going back to the *French Commission on Atomic Energy* to write my thesis. I expect to defend it at the beginning of next year.

I would like to thank my supervisor, Prof. Vincent Hayward, who made my stay at CIM possible, and showed a big interest for my work. I also want to thank all the students who helped me, especially Michel Doyon for his help regarding the Sarcos system.

Rest assured that I will never forget Canada since I return home with a marvelous souvenir: Alice, my little Canadian baby girl. Good-bye to everyone, and hope to see you in France! (My new e-mail address is joly@suisse.far.cea.fr)."

Au revoir et bonne chance, Luc!

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

Editor: Louise Cl  roux (e-mail: manager@cim.mcgill.ca)

Associate Editors: Kathleen VanderNoot <kathleen@>, Michael Daum <mdaum@>, Nicholas Roy <nickr@>

Food and Games. The perfect ending for this beautiful day... Noga's delicious home made cheesecake!!



NEWS AND EVENTS

 The TAV Institute of Montreal, affiliated to the Champlain College in Montreal, now accommodates over 900 students. Because of their financial circumstances, these students often cannot afford to buy the texts and supplemental materials which they need for their courses.

Thus, the institute is asking for our help. If anyone has any books that could be donated to help TAV establish a library, please deposit them in the box in the CIM lounge. On behalf of TAV, thank you very much.

 **Access during quiet hours:**

- the entrance doors to the Frank Dawson Adams (FDA) building will be locked from the morning of Monday, June 17, 1996 to Monday, August 5, 1996 owing to construction activities;

- 'quiet hours' access to the Engineering Complex AND to the Physical Sciences and Engineering Area Library will be through the main doors (Milton St. entrance) of the McConnell Engineering building;

- access to FDA from the Campus during regular hours will be through the adjacent buildings.

Please bear with us during these long awaited and most welcome renovations.

Hats off to ...



 Congratulations to Frank Ferrie who was granted tenure and promoted to Associate Professor of Electrical Engineering on June 1.

 On May 8, at the Canadian Society of Mechanical Engineers Conference in Hamilton, Prof. Evangelos Papadopoulos received the Outstanding Paper Award, 1995 CSME Transactions. The paper entitled "A Design Methodology for Zero Reaction Robots," and co-authored with A. Abu Abed, appears in the Special Issue of the Transactions of the CSME, Vol. 19, No. 3, 1995, pp. 197-211.

 At the Engineering Convocation Ceremony held on June 6, many CIM graduates were honoured. Doctorate degrees were conferred on the following: Benoit Dubuc, James Elder (Dean's Honour List), Peter Knights and Kenong Wu.

 Oliver Astley (Dean's Honour List), Stephen Benoit, Nadim El-Fata, Donghai Ma, Shailendra Mathur, Pham Tan Loc, Cristina Rizzuto, Robert Wodnicki (Dean's Honour List) and Xumei Zhang received their Masters degrees.