

Facilities



Robotic Mechanical Systems Laboratory
Philippe & CUATRO

The physical resources of CIM comprise about 14,000 sq. ft. in the McConnell Engineering Building on McGill's main campus. This represents a nearly contiguous collection of offices, laboratories, meeting rooms, and space dedicated to house an extensive information system. This proximity creates a working community where we naturally and regularly meet, and interact with each other.

Our diverse research culture is home to 13 interdisciplinary laboratories specializing in the areas of:

- Robotics
- Mechatronics
- Aerospace
- Systems & Control
- Haptics
- Vision
- Medical Imaging
- Shared Reality



Shared reality and augmented environment

Location

Centre for Intelligent Machines
3480 University Street
Room 410
Montreal, QC H3A 2K6

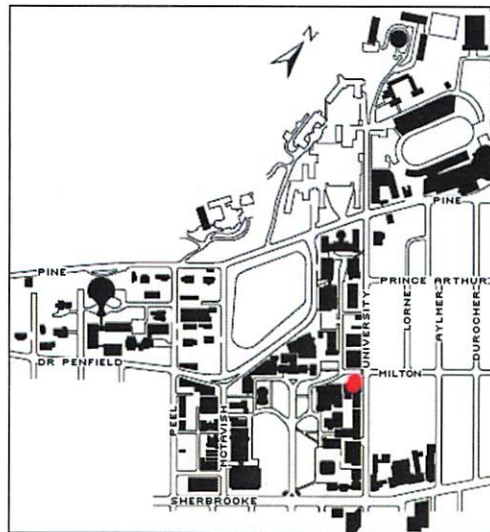
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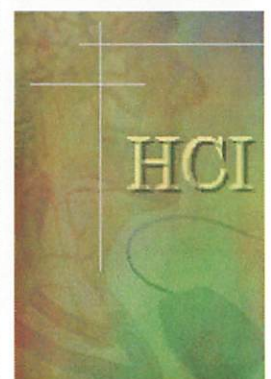
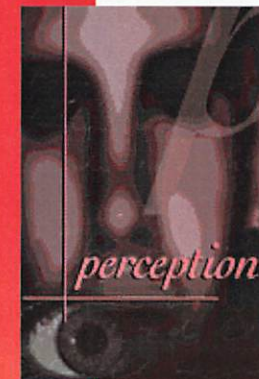
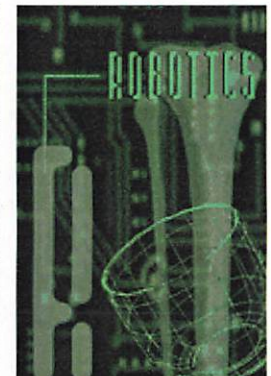


Centre for Intelligent Machines

- Multidisciplinary
- Inter-faculty
- Inter-institutional

Symposium

CIM 20th Anniversary Celebration &



www.cim.mcgill.ca

About us

The **Centre for Intelligent Machines (CIM)** supports graduate research, teaching, and applications of intelligent systems. Our dynamic community of scientists, engineers and designers seek to bridge science and innovation. Their novel ideas bring solutions to some of the most challenging problems of the 21st century information-driven society.

CIM's origins can be traced to the late 60's and the pioneering vision of Martin Levine, who began to investigate artificial perception from the perspective of systems theory and applied mathematics.

Rupert in the
Medical Imaging
Lab



Bound by the common goal of cybernetic research – intelligent machines - Levine motivated a core group of academics in engineering and science to officially form the McGill Research Centre for Intelligent Machines (McRCIM) in 1985.

Today the Centre is comprised of over 20 faculty members, 13 topical laboratories; approximately 150 graduate and honors-undergraduate students, post-doctoral fellows and visitors from the Departments of Electrical and Computer Engineering, Mechanical Engineering and the School of Computer Science. CIM also has associate members in related disciplines at McGill, Quebec universities and institutions.

CIM continues to make powerful contributions to the education of tomorrow's leaders in the field of Intelligent Systems. Our students are truly outstanding, as evidenced by their accomplishments in both academia and industry. Another remarkable manifestation of CIM's culture is the steady creation of spin-off companies, by students, to rapidly exploit the technologies associated with their research. About 15 such companies have been formed in the past 10 years alone.

Research



Chris & Christina with the
Mechatronics AQUA Project

Some of the faces have changed over the past 20 years, but the fundamental research objectives and philosophy remain the same – to push forward the boundaries of intelligent systems through scientific discovery, to educate new generations of cyberneticists and to apply this knowledge to the development of technologies that address the complex needs of modern society.

Our Centre's research program is expressed around four themes designed to reflect the rapid evolution of the sector of Intelligent Systems:

- artificial perception
- robotics
- systems and control
- human-machine interfaces



Aerospace Mechatronics Laboratory.
Damian working on Airship.

Collaboration

The operation of our Centre is driven by our collective research needs with an eye towards synergy and economies of scale. Resources are fully shared among all users in the CIM community. This open, collaborative environment encourages academic debate and the free exchange of ideas. Since 1998, ten academic hires in the Faculties of Science and Engineering accepted positions at McGill largely because of the presence of the Centre and the opportunity to interact with CIM members.

There are over **100 research programs** (research grants, collaborative research programs, research contracts, etc.) currently supported by the CIM facilities. This amounts, on average, to 3 million dollars per year of funded research. There are few institutions in the world that can provide comparable training for graduate students and postdoctoral fellows in related disciplines.



Visual Motor Systems Laboratory

We have been successful over the years in attracting funding from numerous sources: (**NSERC, NCE, CFI, FQRNT, DRES, DARPA**, Canadian, U.S., and other foreign industries), and have used this, in part, to support the acquisition of state-of-the-art research facilities.