

## Dr. Wei Song Joins the Faculty



The UNB Faculty of Computer Science has the pleasure of announcing the appointment of Dr. Wei Song as Assistant Professor starting July 1st, 2009.

Wei Song earned her Ph.D. degree in Electrical and Computer Engineering from the University of Waterloo in 2007. Since 2008, she has worked as a postdoctoral research fellow at the Department of Electrical Engineering and Computer Sciences, University of California, Berkeley.

Her current research interests include the interworking of cellular networks and wireless local area networks (WLANs), resource allocation for heterogeneous wireless networks, cross-layer optimization for multimedia quality-of-service (QoS) provisioning, and cooperative multi-hop relay communications.

Dr. Song received a Best Paper Award from the IEEE Wireless Communications and Networking Conference (WCNC) in 2007 and a postdoctoral fellowship from the Natural Science and Engineering Research Council (NSERC) of Canada in 2008. She is an Editor of International Journal of Communication Networks and Distributed Systems and a co-guest editor of Springer Wireless Personal Communications Journal for the special issue on adaptive communications in wireless networks from March 2009 to January 2010.

## Piece of UNB Computing History Installed in the ITC

In late July, UNB's only remaining punch card station was installed in a specially-designed display cabinet in the foyer of the Computer Science Information Technology Centre. As the common way for data to be entered into a computer for decades, the punch card station is iconic for many of the mainframe era of computing.



L to R: Rick Wightman & Ali Ghorbani (UNB Faculty of Computer Science), Randy Arnold (IBM), Terry Nikkel & Terry Arnold (UNB Integrated Technology Services).

# Dianne Muir Recognized for Outstanding Service

In March of 2009, Dianne Muir received a UNB Distinguished Service Award for her outstanding service to the university.

Ms. Muir joined the University of New Brunswick in 1989 as an Executive Assistant and Seminar Coordinator under Director Kevin Lemon at the Construction Technology Centre. During this time she worked hard and travelled extensively throughout the Atlantic Provinces with the Board of Directors as well as independently while hosting numerous seminars. As she put it "The highlight of her time with the Centre was the Construction Symposium in 1992 featuring guest speaker, Retired General Norman Schwarzkopf". From 1995 to 1996 she worked as an Administrative Secretary at the Muriel McQueen Fergusson Centre for Family Violence Research. Dianne joined the Faculty of Computer Science as a Secretary/Clerk PL4 on August 1, 1996.

Dianne carries out all of her many duties with the utmost professionalism and respect for those with whom she works. She is a caring employee who provides service to our faculty at a level that is exemplary of the highest standard. Even in the midst of difficult times, Dianne maintains a smile and a positive outlook, giving help where needed and often doing more without being asked. Given a job, she always finishes it in the assigned time.

Here are some quotes from those who nominated Dianne for the Distinguished Service Award:

"Dianne personifies the type of service these awards are all about".

"Dianne is consciousness regarding her work ethics, for example, you can count on her to follow through on any task you ask her to do."

"She can always answer your question, if she does not know, she knows the right person on campus to ask."

"Perhaps, most of all, Dianne's greatest character trait is her spirit of enthusiasm and cheerfulness. She is always there keeping things humming and positive."

So, to say that Dianne Muir exceeds the expectations of employees in the Faculty of Computer Science would be an understatement. The majority of our faculty believes that her service to the students, staff, faculty members and the university at large has far exceeded the requirements of the job.

Dianne's attitude is that everyone, pulling together, can make the University a better place to work and a better place for our students to get a true education and succeed.



## Dr. Fleming: 2009 University Teaching Scholar

Dr. Michael Fleming was one of two recipients of the 2009 University Teaching Scholar award. This award honours leading teachers at the University of New Brunswick. It is intended for UNB teachers who have demonstrated a consistently high level of teaching excellence and teaching-related activities.

Dr. Fleming is one of our most outstanding teachers. The students have awarded him the faculty's Excellence in Teaching award twice in the past 4 years, 2004 and 2008, and he has been nominated many times.



Michael has been actively involved in the development of several new courses. He was instrumental in developing the course CS2333, Computability and Formal Languages. Michael was also responsible for the development of two graduate courses, CS6785 User Modelling, and CS6905 - Advanced Topics in Computer Science (Decision Theoretic Agents). Dr Fleming has supervised several graduate and undergraduate theses.

Michael is one of our most effective student advisors and is the manager of our faculty mentors program, which assigns each student to a single professor for his/her entire 4 year program. As advisor to our first year students he played an essential role in helping students to adapt to our curriculum and program. He has continually shown both in his teaching and in his advising a very strong commitment to and a concern for all of our undergraduates.

All of our faculty and students are delighted that the university has seen fit to present Michael with this award of distinction.

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# Looking Back

By Dr. Ali Ghorbani

Special Series  
Part 3

In our last issue we mentioned that in response to the demand from industry and students the B.Sc. (C.S.) program was established in 1972. In 1974 the Department of Computer Science became the School of Computer Science to administer the new B.Sc. (C.S.) program. For budget and administrative purposes the School of Computer Science remained attached to the Faculty of Engineering.

The School's Master of Computer Science program remained relatively constant during the rapid expansion of the undergraduate program during the late 1970's and early 1980's. By the end of 1982, there had been 77 graduates of the Master of CS program. The School experienced a substantial increase (41%) in graduate student enrollment in the 1983/84 academic year. It was during this time that the School decided to strengthen its existing research area of image analysis and synthesis, data-base systems, software engineering and human computer interaction, and develop a group for research in the general area of computer networking-terminal (workstation) design.

The School also decided to increase its technology transfer type research with other university groups and centres.

By 1982, the School of Computer Science was heavily involved in offering undergraduate service

courses to other degree programs at UNB. The School's first course (CS1003) was offered to a wide variety of students (over 1200 in the 1982/83 academic year) using card-punches for computer input. Later, the wide disparity in ability and/or background of students taking their first course in Computer Science led the School to offer more than one version of CS1003.

The School's Co-operative Education program became operational in May 1982 and soon after received accreditation from the Canadian Association for Co-operative Education (CAFCE). In its second year of operation (the 1982/83 academic year) it had approximately 40 students and a dozen employers. The Coop program was established to provide relevant work experience for Computer Science students. With the Coop program came the need to offer five Computer Science courses in the May-August study term (Intersession and Summer Session). Documentation from 1982/83 shows that all students and employers involved with the Coop program were very enthusiastic and satisfied with the program. The School's faculty members were also strongly supportive of the program. (To be continued in our next issue ...)

\* Source: Notes and documents from the Faculty of Computer Science Archive.





# Faculty's Newest Degree Program

The Faculty of Computer Science at UNB may be the oldest in Canada, but it's staying young by adapting to student and industry needs. In the fall of 2007 the Faculty launched a new Bachelor of Information Systems (BISys) program. The new BISys degree program is designed for students who have an interest in using information technology to solve business problems.

Many of the program's current students were drawn to BISys because of the emphasis placed on business fundamentals. Craig Ferguson, a third year BISys student, says he feels lucky to be able to learn from experts in both

computer science and business. "For me classes such as marketing have really helped me relate the technical part of my degree to the real world and how to have success there," said Ferguson.

The new program has had strong support from an IT industry in dire need of skilled professionals. "I enthusiastically support the Bachelor of Information Systems program concept as it will provide a new supply of graduates who are prepared to work with the information systems on which government depends heavily" said Danny Keizer, Chief Information Officer for the Province of New Brunswick.

IT graduates with both business and technical skills are in strong demand. "This is a very important and timely initiative that UNB has undertaken as there is an urgent need for graduates with knowledge in both business and information management," explains Ronald Surette, Director General of Business Intelligence for the Atlantic Canada Opportunities Agency.

The BISys program consists of 40 courses which include required courses in computer science, information systems, business administration, economics, mathematics, and statistics. Students also have 9 electives that allow them to specialize in a specific technical, business or other domain. As well, the program offers students access to the well-established co-op program within the Faculty of Computer Science that provides valuable paid work experience.

Business analyst, systems analyst, database designer, application developer, IT consultant and project manager are examples of the successful careers BISys graduates may pursue.



## Research Expo a Success

The 6th Research Exposition of the UNB Faculty of Computer Science was held on April 8 of this year. This annual event showcases the Faculty's current research projects and highlights collaborations with New Brunswick IT industries.

More than 100 participants attended the Expo, among them 50% were UNB researchers and students, and 50% were information technology professionals from the New Brunswick private and public sectors. More than 15 New Brunswick companies and government organizations sent their representatives to the Expo. The 2009 Research Exposition published 20 research papers and posters written by researchers and students of Faculty of Computer Science.

A total of 17 speakers gave talks during the Expo. Minister Greg Byrne of Business New Brunswick gave an important speech on behalf of the provincial government to emphasize the importance of information technology innovations to New Brunswick's economic growth. A top-class researcher from China Academy of Sciences gave the keynote address on web ecology.

A panel discussion on R&D collaboration between UNB and the NB IT sector included 6 panelists from NB private companies, Service New Brunswick, the National Research Council, and UNB. All panelists expressed support for strong R&D collaborations between UNB and the NB IT sector, and suggested a variety of strategies to enhance such collaborations.

For more on the CS Research Exposition, please visit: <http://www.cs.unb.ca/itc/ResearchExpo>

## CS Happenings...

In 2009, for the fifth year in a row, IBM Canada selected UNB Computer Science Co-op Students for their Extreme Blue Summer Internship Program. Cody Harris and Jason Fam were two of the 15 technical students chosen from a national applicant pool (of over 360 technical applicants). In this program, students are grouped in teams of four, including three technical students and one MBA student. Each team develops software from scratch, creates a business case and makes a presentation to IBM executives in New York City. These students are also given the opportunity to network with industry leaders throughout their work term.

In May, James McManus (MCS student) earned a bronze medal in the plus 100 kg category at the Canadian Senior Judo Championships held in Sherbrooke, Que. McManus now continues his training in preparation for the Francophone Games scheduled for Beirut, Lebanon in the fall.

On July 1, two new Assistant Deans started their terms. Dr. Michael Fleming is now the Assistant Dean for Undergraduate Matters, and Dr. Brad Nickerson is the Assistant Dean for Research & Outreach.