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RODRIGUE SAVOIE, PH.D.

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PROFESSIONAL EXPERIENCE

2001.10 to present
 Internet Logic Research Group
Institute for Information Technology
National Research Council of Canada (NRC)
 Moncton, NB



► **RESEARCH COUNCIL OFFICER**
 NATIONAL RESEARCH COUNCIL OF CANADA

As a Research Council Officer, my duties relate to innovation, technology development and technology transfer in the general areas of IT, learning, education and more specifically e-Learning. More of my specific research interests are detailed further in this résumé.

Generally, this includes identifying and managing research projects, executing and managing towards the project's defined goals and objectives in order to achieve the desired results. Keys to success involves establishing links with various partners with the end goal of enhancing the competitiveness of Canada's e-Learning industry by helping to achieve one of the NRC's missions: "transforming ideas into products and services" through applied research.

2002.01 to 2005.11
 e-Learning Research Group
Institute for Information Technology – e-Business
National Research Council of Canada (NRC)
 Moncton, NB

► **GROUP LEADER, E-LEARNING RESEARCH GROUP**
 NATIONAL RESEARCH COUNCIL OF CANADA

I was appointed Group Leader in January 2002 (two months after joining the NRC). At the time, the group comprised 3 members. It eventually grew to about 15 members before being dissolved (in November 2005) due to Federal Government funding cutbacks and subsequent realignment of our Institute's overall research agenda.

"The National Research Council (NRC) is the Government of Canada's premier organization for research and development. Active for over 80 years, it boasts over 4000 employees."

"Leading-edge research and development (R&D) is at the very core of NRC's contribution to Canada and all Canadians."



Some of my major achievements and functions included:

- leading staffing efforts to arrive at a Group complement of 15 personnel;
- overseeing the Group's complement of projects (15+ with an aggregate value of \$ 20 M+, including collaborators' interests);
- developed and aligned the Group's agenda with those of our organization;
- in broad terms, my regular functions included managing and overseeing NRC - IIT's Moncton activities including client (collaborator) interactions.

2001.07 to 2001.09
 Groupe IDITAE
Université de Moncton
 Moncton, NB

► **CONSULTANT, MULTIMEDIA PRODUCTION**
 GROUPE IDITAE, UNIVERSITÉ DE MONCTON

- developed online pedagogical resources for Spanish and Law courses (Adobe Photoshop, Macromedia Flash and Director)
- developed interfaces for various Shockwave applications

The IDITAE Group is the Université de Moncton's 20+ member e-Learning development team

2003.01 to present
 Adjunct Professor, Faculty of Education
 1994.08 to 2002.05
 Various professorial positions
 Various faculties but mostly Faculty of Engineering
Université de Moncton
 Edmundston and Moncton, NB



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VARIOUS PROFESSORIAL POSITIONS UNIVERSITÉ DE MONCTON

I prepared and taught several courses (20+, some more than once) in the areas of engineering, technology, mathematics, statistics and physics.

Besides teaching activities, I was active in several committees and performed research in different fields: Computational Fluid Dynamics, Multimedia, Knowledge Representation and e-Learning (details further in this résumé).

ACADEMIC BACKGROUND

1993.05 to 1996.12
 Department of Mechanical Engineering
Université de Sherbrooke
 Sherbrooke, Qc
 The Université de Sherbrooke is well known throughout Canada for its COOP internship programs



PH.D. (MECHANICAL ENGINEERING, FLUID MECHANICS) UNIVERSITÉ DE SHERBROOKE

- ▶ awarded scholarships from the Université de Sherbrooke and the Université de Moncton totalling \$ 25K over one and a half years
- ▶ awarded NSERC (Natural Sciences and Engineering Research Council of Canada) Scholarship, \$ 34.8K for two years
- ▶ exempted from course work (Université de Sherbrooke) and taught 7 courses (Université de Moncton) while doing graduate work at a distance

1990.05 to 1992.04
 Department of Mechanical Engineering
Université de Moncton
 Moncton, NB
 Distributed across three campuses in New Brunswick, it is the biggest French language Canadian university outside of Québec



M.A.SC. (MECHANICAL ENGINEERING, FLUID MECHANICS) UNIVERSITÉ DE MONCTON

- ▶ awarded NSERC (Natural Sciences and Engineering Research Council of Canada) Scholarship, \$ 15K per year for two years
- ▶ awarded the Governor General's Gold Medal (awarded to the graduate having the best academic performance during his or her graduate studies)
- ▶ **GPA: 4.00 / 4.00**

1987.09 to 1990.04
 Department of Mechanical Engineering
École Polytechnique de Montréal
 Montréal, Qc
 Affiliated to the Université de Montréal, Polytechnique is one of Canada's three biggest engineering schools



B.ENG. (MECHANICAL ENGINEERING) ÉCOLE POLYTECHNIQUE DE MONTRÉAL

- ▶ graduated with the highest GPA out of ~175 students in Mechanical Engineering and ~800 in the overall engineering class of 1990
- ▶ **GPA: 3.97 / 4.00**
- ▶ part of the first COOP cohort at l'École Polytechnique de Montréal

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EXPERIENCE IN INDUSTRY

1989.01 to 1989.05
 Succursale 50
IBM Canada Ltd.
 Montréal, Qc
 "IBM Canada Ltd. is one of Canada's leading providers of advanced information technology products and services."



SYSTEMS ENGINEER (COOP TERM) IBM CANADA LIMITED

- ▶ demonstrated IBM software and hardware, both in house and to potential clients
- ▶ implemented computer systems and analyzed the capacity of mainframe computers

SUMMERS 1986, 1987, 1988
 Habitat Management Division
Department of Fisheries and Oceans, Gulf Region
 Moncton, NB
 "Fisheries and Oceans Canada is the lead federal government department responsible for developing and implementing policies and programs in support of Canada's economic, ecological and scientific interests in oceans and inland waters."



STUDENT ENGINEER DEPARTMENT OF FISHERIES AND OCEANS, GOVERNMENT OF CANADA

- ▶ surveyed river systems, including structures like dams and fishways and wooded regions; designed fishways and prepared technical drawings of dams, fishways and river systems; analyzed sediment movements as they related to dredging and dumping operations, and also evaluated several other projects related to fish habitat and migration

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RESEARCH ACTIVITIES

RESEARCH GRANTS / OTHER FUNDING

I am currently involved (various roles and capacities including leadership and management) in several projects that have received various types of funding and include a wide array of partners (both private and public). In all, the Group that I led is involved to some capacity in 15+ collaborative research projects as well as 5+ internal research projects. For most of these projects, our role revolves around developing generic technologies to be licensed for the creation of new products / services. Funding sources for these projects include Canarie Inc., the Atlantic Innovation Fund, the Canadian Innovation Foundation, the New Brunswick Innovation Foundation, Heritage Canada (Canadian Culture Online) and others.

RESEARCH PUBLICATIONS

I am the principal or secondary author of several research publications within the fields of e-learning, fluid mechanics and the scientific visualization of fluid flows. I have also made several scientific and general interest presentations in these areas (and others pertaining to R&D, technology transfer and innovation).

RESEARCH THEMES AND INTERESTS

Early in my research career, my interests were focused in various areas of Fluid mechanics (mainly CFD). Some of my main developments included: developing a robust computer code that afforded significant advantages over existing methods (in terms of computational speed and accuracy of the simulations) and developing a "circular" boundary conditions for the flow's inlet / outlet.

Since the mid 90s, I have focused mainly on e-learning and related themes. One of my main areas of interest concerns mapping: concept, knowledge and information. The goal is to use advantages inherent to these types of tools to accelerate the learning process (especially within online environments). Overall, I work on identifying various means of reducing time and effort for learners to get from a state of "not knowing" to a state of "knowing" as "efficiently" as possible. Simultaneously, my research focuses around optimizing creation and development processes for producers of learning resources in order to arrive at technologies for bettering time to market outcomes.

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GENERAL PROFILE

- ▶ I am fluently bilingual (French and English): exemption for life, Government of Canada bilingualism exams (EEE profile).
- ▶ I master computer-related applications very quickly. Some of the tools that I use more often fall within the following categories: OS and programming, sound editing tools, video / animation tools, graphic illustration / photo editing tools and general / productivity tools.
- ▶ I have been using the Internet since before the advent of the WWW and am extremely familiar with its workings and protocols. I have extensive experience in multimedia development having developed several works in both print and electronic forms.
- ▶ Throughout my career, I have been very active in extra curricular activities (various roles / achievements on various committees).

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REFERENCES

Available upon request.