

- 1989 - 1990 **Qualifying year in Mathematics** McGill University
- Scholarship from F.C.A.R. for a Masters' degree
- 1986 - 1989 **B.Sc. Joint faculty program in Biology and Mathematics** McGill University
- Great Distinction
- 1983 **Québec Mathematics Competition** Québec Mathematics Association
- Mention for the secondary V competition

Professional experience

- 2003 - 2004 **Consultant** [Goa Technologies](#)
- Closer Look* - Search engine that identifies data in web databases
- Proof of concept for identification of web page structures based on XPath
- 2003 - 2004 **Software Architect and Developer** [HandCastles inc.](#)
- DistriBistro* - Palm-based wireless ordering system for restaurants
- Requirements, UI design and architecture
 - Peer-to-peer communication architecture
 - Prototype completed. We decided not to proceed with production.
- 2000 - 2001 **Software Architect and Developer** [Mitel Networks inc.](#)
- [*Speak@Ease Messenger*](#) - Speech-enabled Unified Messaging
- Initial architecture draft
 - Advanced natural-language dialogue designs using pronoun reference
 - Integration with Microsoft Exchange 2000 using CDO objects through XML
 - Other components : web back-end (XSL), upgrades, inter-process messaging

1999 - 2000 **Software Architect** Logiciels Panteor inc.

Translateor - Automatic translation system for English and French (project)

- Developed a robust meta-data architecture using XML for storage of linguistic information in an object-oriented database
- Participated in the development of a OO model for abstract semantic representation of text

1997 - 1998 **Advisor** [Centre de Recherche Informatique de Montréal](#)

Giza - OO architecture for polymorphic representation of structured data using contextual, dynamic attributes

- Conception and programming (Java) of a new Design Pattern
- Approach was published at OOPSLA

1996 **Senior Research Agent** CRIM, for Bunyip

Radio Insite - Dynamic HTML page generator for logs of CBC radio shows.

- Programming (Perl5) of a log file parser that adjusts to a meta-data file and stores the results in HTML templates

1996 - 1997 **Senior Research Agent**

UKAT - Web interface to a knowledge assessment tool.

- Architecture and programming (C++) of a HTML template-based system

1995 - 1996 **Senior Research Agent** CRIM

Francoroute - Prototype of a classification system for francophone Internet sites

- Team coordination, architecture and programming (Java, Perl5, Oracle) of one of the first hybrid web search engines (using both keyword search and category classification), based on the Cheops approach
- Programming (Perl5 and Oracle) of a web spider that explored French sites
- Programming (Perl5) of a web-based site classification tool based on Dewey

1995 - 1996 **Senior Research Agent** CRIM

CHEOPS - A navigation tool for hierarchical data

- Programming (Java) of a unique data navigation tool based on visual elision

1994 - 1995 **Research Agent**

CRIM, for [Alis technologies](#)

Lys - Multilingual mail agent

- Architecture and programming (C++) of a Unicode-based mail agent able to handle Arabic, Chinese, Japanese and Korean scripts using font composition

1992 - 1994 **Analyst**

[Les Logiciels Machina Sapiens inc](#)

[Le Correcteur 101](#) v.2.0- French grammar analyzer and checker

- Team coordination between linguists and programmers, research in computational linguistics, algorithms, programming in C++
- Awards won by the software (version 1.0 or 2.0):
 - 1993, **Prix Octas**, from the Fédération d'Informatique du Québec
 - 1994, **Prix du Français en Informatique**, from GIRICO

1990 - 1992 **Programmer**

Les Logiciels Machina Sapiens inc.

Le Correcteur 101 v1.0b - French grammar analyzer and checker

- First grammar checker of the industry to do global parsing of French syntax
- Design and programming (C++) of the user interface on a platform-independent framework

1988 **Research Assistant**

Montreal General Hospital

Real-time neurobiology data acquisition system

- Reengineering (Vector Basic) of a graph display system

1986 **Programmer**

O.C.C. Informatique, for National
Bank

FÉER estimate software

- Programming (MS-Basic) of an iterative analysis method
- Graphical user interface on a text-based display

1984 **Programmer**

La société Québit logiciel inc.

Méga-Texte - word processor for primary school students

- Design and programming (6502) of a graphic-display based word processor on the Apple II+

1982 **Programmer**

Société Logidisque enr.

[Têtards](#) - Labyrinth-type two-player video game

- Programming (6502 on Apple II+)
- First video game designed in Québec

Teaching experience

2003 **Teaching Assistant** University of Ottawa
Economic Systems Design (SYS5140)
 Designed and presented an introduction to agent-based programming

2002 **Teaching Assistant** University of Ottawa
Concepts des langages de programmation (CSI3525)
 Participated to the design of laboratory demonstration and problems

1994 - 1995 **Instructor** CRIM
Séminaire d'Introduction à l'hypertexte

1989 **Teaching Assistant** McGill University
Differential calculus (189-121A)

1984 **Instructor** Collège Mont-Saint-Louis
Initiation to Computer Science - evening course

Publications and workshops

Presentation: [Outside the box : Tinderbox XML Tools](#), at the Boston [Tinderbox Weekend](#), 2004

Tech Note: [On-the-fly contextual adaptation with the RoleAdapter Pattern](#), in *Proceedings of OOPSLA'98* (Vancouver BC, 1998), ACM Press

Demonstration : [Applications of the RoleAdapter Pattern](#): Representing class inheritance and aggregation hierarchies with the Giza framework, in *Proceedings of OOPSLA'98* (Vancouver BC, 1998), ACM Press

Report: [État des technologies de stockage d'objets en Java](#), CRIM, 1997

Presentation: [GIZA : A framework for visualization](#), by Marc-Antoine Parent and Louis Vroomen, in the workshop: [Graphical User Interfaces for Hierarchies \(Human-Computer Interaction Laboratory\)](#), University Of Maryland, 1997)

Article: [Cheops: A Compact Explorer For Complex Hierarchies](#), by Luc Beaudoin, Marc-Antoine Parent and Louis Vroomen, in *Visualization '96*, San Francisco, USA, Oct 1996, pp. 87-92

Article: [Font Selection and Font Composition for Unicode](#), by Martin J. Dürst and Marc-Antoine Parent, in *Proceedings of the Seventh Unicode Conference*, San Jose, CA, 1995

Languages

Fluent in spoken and written French and English
Basic level of reading and speaking Italian and Portuguese

Interests

My interests are twofold: As an academic, I am interested in the process of human decision making. This has led me, over time, to study the human mind under the guise of various disciplines: in turn neurobiology, mathematical logic and linguistics. I am now approaching the same issue with a lens from organizational communication and systems theory, with the hope of applying it to tools for large-scale collective deliberation.

However, my academic interests have more often than not been expressed in the form of software rather than papers: whether I have worked on computational syntax or semantics, hypertext or information visualization, I was also interested in formal representations of human thought. As a programmer, my interest in the structure of software (patterns, UML) is also evolving into a renewed interest in the techniques that allow groups to decide and work together.