

# Attila Barta

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## Experience

- 1998-Present **INTERNATIONAL BUSINESS MACHINES** **Toronto, ON**  
*Senior Managing Consultant – Technology Strategy, Business Consulting Services*
- Led client facing engagements in capacities such as: Engagement Manager, Pre-Sales (Technical Sales), Systems Engineer, Lead Architect, Project Manager in industries such as: finance, telecom, CRM, federal and provincial government in Canada, US and the Caribbean
  - Led compliance projects, i.e. Sarbanes-Oxley, SAS-70, for large financial institutions based on the COBIT and ITIL frameworks using the RUP methodology and the IBM GS Method
  - Extensively involved in the Pre-Sales process from bid development to client signing, including client proof-of-concept, client presentations and workshops, for large financial institutions, federal and provincial government and large telecom companies using the IBM Signature Sales Method
  - Awarded the “IBM Service Excellence Award”, “IBM Bravo Achievement Award” and the Royal Bank of Canada “You Made a Difference” award for excellence in consulting
- Systems Engineer – WebAhead Lab (IBM’s advanced R&D lab)* **Southbury, CT**
- IBM intraGrid project
- Contributed to the development, marketing and pre-sales of intraGrid – an IBM tool for managing large grid infrastructures based on OGSA standard and the Globus Tool Kit
- Lead Architect – Extreme Blue (IBM High Performance Teams)* **Raleigh, NC**
- Autonomic Computing Middleware project
- Lead the design, proof-of-concept and marketing of a novel paradigm for customer product management and large scale deployments using a knowledge base approach and a SOA architecture
  - Filled seven patent applications, awarded the IBM Invention Achievement Award
- System Analyst – Almaden Research Center* **Almaden – San Jose, CA**
- DB2 XML Wrapper project – provides transparent SQL access to relational and XML data
- Designed the algorithm and implemented TurboXPath, a lightweight twig-query / XPath processor, according to DB2 engine quality requirements and IBM’s SDLC requirements
  - Developed XML Cutter, a packaging of TurboXPath to address the CLOB size limitations in the DB2 XML Extender
- Research Scientist – Centre for Advanced Studies* **Toronto, ON**
- Developed a WebOQL based technology (a 2<sup>nd</sup> generation Web Query Language) for analytic processing of large software engineering tools, i.e. Refine, Riggi and Software Bookshelf
- 2002-2003 **KNOWLEDGE4YOU.COM** **Toronto, ON**  
*Consultant / Pre-Sales Architect*
- Extensively involved in pre-sales activities, such as client proof-of-concepts, presentations and customizations for BI solutions based on the Olap4You engine
  - Developed benchmarks for the database back-end of Olap4You – a business intelligence tool using DB2-UDB, Oracle, SAP-DB, Pervasive-SQL, BerkeleyDB, MySQL
- 2001-2002 **ONTARIO CANCER INSTITUTE** **Toronto, ON**  
*Consultant / Data Architect – Division of Cancer Informatics*
- Led developed for a solution to integrate multiple web-enabled genomic sources
  - Setup and administered massive parallel genomic databases in DB2-UDB on IBM-SP clusters
- 2000-2001 **BELL UNIVERSITY LABORATORIES** **Toronto, ON**  
*Lab Manager – Knowledge Management Lab*
- Led development, marketing and pre-sales for EXIP (Executive Information Portal) a Knowledge Management System providing tools for building and analyzing semantic models and DocMan, a Content Management System for enterprise strategic business analysts
  - Led the development of v2 of ToX (Toronto XML Engine) a native XML database system
- 1998-2003 **UNIVERSITY OF TORONTO** **Toronto, ON**  
*Lecturer – Department of Computer Science*
- Lectured 3<sup>rd</sup>/4<sup>th</sup> year undergraduate courses in Database Systems and Systems Analysis and Design
- Research Scientist – Computer Systems Research Group*

- Developed a cost based query optimizer for native XML databases. Proposed a novel cost model for access path selection in XML databases and a novel two-stage XML query optimization strategy
- Developed a methodology for integrating large Web sources using domain ontologies. Implemented proof of concept, Apparel WebCat, a comparison shopping portal for apparel catalogs
- Raised Venture Capital financing for Apparel WebCat

1996-1996 **QUAD INFOTECH** **Toronto, ON**  
*Systems Engineer*

- Extensively involved in Pre-Sales, Customer Management and Training for QMOS, a real time decision support system for the steel industry implemented in PowerBuilder and Oracle

1992-1995 **ACADEMY OF ECONOMIC STUDIES** **Bucharest, Romania**  
*Associated Assistant Professor - Faculty of Cybernetics and Informatics*

- Lectured 3<sup>rd</sup>/4<sup>th</sup> year undergraduate courses in Database Systems and Information Systems Design
- Participated in joint research projects on large information retrieval systems

1993-1995 **NATIONAL RESEARCH INSTITUTE FOR INFORMATICS** **Bucharest, Romania**  
*Senior Research Scientist*

- Participated in development of RomCat, an integrated software for cataloguing, using the national cataloguing format (ROMARK) and FOCUS, an Information Retrieval System for Large Libraries

1992-1993 **TECHNICAL UNIVERSITY OF CIVIL ENGINEERING** **Bucharest, Romania**  
*System Analyst*

- Participated in system analysis and implementation of BDUC, a nation-wide integrated system for surveillance of hydroelectric dams

1989-1992 **IFET DATA PROCESSING CENTER** **Csikszereda, Romania**  
*Software Engineer*

- Participated in development of enterprise software packages for accounting, finance and engineering
- Administered heterogeneous networks of PDP-11, CP/M and DOS machines

## Skills

**Programming Languages:** Java, C++, JavaScript, Perl, Pascal, Fortran, Basic, SQL-3, FoxPro  
**DBMS:** DB2-UDB, Oracle, MS SQL Server, Berkeley DB, Pervasive SQL, FoxPro  
**Technologies:** SOAP, WSDL, Servlets, JSP, WebSphere, TomCat, Globus Tool Kit  
**Operating Systems:** AIX, Solaris, Linux, Novell, Windows, VMS, RSX-11, MS-DOS, CP/M  
**Methodologies:** SOA (Service Oriented Architecture), CBM (Component Business Modeling), IBM GS Method, IBM Tivoli Unified Process, IBM Signature Sales Method, RUP, ITIL, COBIT, UML, SSADM, Merise

## Education

**UNIVERSITY OF TORONTO** **Toronto, ON**

1998-2005 *Ph.D. in Computer Science*

- Thesis – *Access Methods for XML Query Optimization*, advisor *Prof. Alberto O. Mendelzon*
- IBM Centre of Advanced Studies scholarship 1998 - 2000

1996-1998 *M.Sc. in Computer Science*

- Thesis – *WebCat - Information Integration for Web Catalogs*, advisor *Prof. Alberto O. Mendelzon*
- University of Toronto Open Doctoral Fellowship 1996 - 1997

1984-1989 **UNIVERSITY OF BUCHAREST** **Bucharest, Romania**

*Engineering Diploma (B.S. & M.Sc.) in Nuclear Physics*, advisor *Prof. Mircea Bercu*

- Thesis – *Testing p-n Junctions using Alpha particles* – filed as a patent, made a major improvement in non-destructive quality control in the semiconductor industry

## Publications

- List of publications at request

## Patents

- Filled seven invention disclosures (list at request), awarded the IBM Invention Achievement Award

## Professional Association

- Assoc. of Computing Machinery, BI Research Network of Canada, IBM Center of Advanced Studies

## Hobbies

- Soccer, squash, hiking and the Toronto International Film Festival