

**Hugo E. Zambrano**  
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## Highlights of Qualifications

- Software development skills mainly in E-R Modelling, Relational Database applications and programming using PowerBuilder and Informix on Unix-based equipment and MS-Windows-based PCs
- Strengths in systems analysis for large organizations
- Fourteen years computer science experience comprising all facets of an information systems career
- Experience in IS strategic planning and project development
- Web authoring, Java and knowledgeable of Networking technology

### DEVELOPMENT TOOLS

Informix SQL/4GL/D4GL/SE/OnLine  
PowerBuilder, C/C++, JavaScript, Java  
MS-SQL Server Stored Procedures  
Pascal, Cobol, Algol, Lisp, Unix-shell  
CASE tools: SilverRun, ERwin

### METHODOLOGIES

Relational Database Modelling  
Object Oriented programming  
Structured programming, prototyping  
DeMarco's analysis and design  
Subset of Price-Waterhouse SMM

### DEVELOPMENT PLATFORMS/HARDWARE

Unix: UnixWare, AIX, Linux, SCO, DEC, HP  
on Compaq, RS6000, PCs, DEC, HP  
Windows NT / 95 / 3.11  
fundamentals of IBM AS/400

### END-USER PACKAGES

Excel, Quatro, Multiplan,  
Harvard Graphics, Mac-draw  
MS-Office,  
Windows, Motif, Mac, ...

### NETWORKING SKILLS

Installation and use of TCP/IP stack  
Web authoring; knowledgeable of CGI  
scripting; currently assimilating Java language

### NETWORKING PACKAGES

OnNet TCP/IP, Unix TCP/IP Servers, ODBC,  
Windows TCP/IP Clients (Web browsers, finger,  
FTP, Gopher, News Readers, E-mailers)

## Employment History

- Mar-1999     **CONSULTANT, OCRPS (Ottawa-Carleton Police Services)**  
Present
- Team coached and led Informix development and support of the Record Management System (RMS)
  - Build up ERM Diagram. Erwin
  - Functionally and technically supported RMS and InCharge systems, components of a Law Enforcement and Emergency System
  - Contributed in various RMS-related implementation projects
  - Administered Informix database servers, upgraded and set up server-to-server connectivity. Informix IDS on UnixWare and Linux
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- Jun-1997  
Nov-1998
- CONSULTANT, QUANTUM-NORTEL (Northern Telecom), Ottawa, ON**
- Supported the Financial Decision Support System back-end and Modified it to make it millennium compliant. **Unix-shells and Informix-4GL.**
  - Modified programs, screens and database of a Financial Planning System as team member of a re-engineering project. **Informix-4GL.**
  - Built up Entity-Relationship Models of existing Databases. **SilverRun-RDM.**
- Apr- 1996  
May-1997
- CONSULTANT, QUANTUM-E.B. EDDY FOREST PRODUCTS, Ottawa, ON.**
- Designed and developed a client/server application for automatic calculation of freight rates for the Warehousing and Shipping system. Tools: **PowerBuilder 5.0** and **MS-SQL Server Stored Procedures.**
  - Programmed new customer requirements and enhanced existing functionality of a paper manufacturing system, including: distributed data transactions, automatic process scheduling, Informix OnLine administration, barcode printing and stored procedures. **Informix-4GL/SQL/ OnLine.**
  - Built additional technical documentation: Program Flow and Entity-Relationship diagrams
- Sep-1994  
Apr- 1996
- PROGRAMMER, R. J. THOMPSON DATA SYSTEMS Inc., London, ON.**
- IBM business partner which markets turnkey business systems to manufacturers and Distributors
- Set up a web server, created web pages and wrote c++ CGI scripts.
  - Scanned and obtained in-depth knowledge of some modules of a large Manufacturing and Distribution System written with **Informix-4GL** and **C**
  - Programmed new customer requirements using Informix-4GL and pre-built C functions on AIX-Unix and Intelligent Query on Unix-Motif
  - Built additional technical documentation: Program Flow and Entity-Relationship diagrams
- Jun-Aug  
1994
- PROGRAMMER, OFFICE SERVICES BRANCH, Ministry of Government Services, Toronto.**
- Reviewed, redesigned and programmed an event-driven application using **Foxpro 2.5** and produced technical documentation
- Mar-Jun  
1994
- VOLUNTEER, CANADA WORLD YOUTH, Toronto**
- File conversions, software installation and technical support
- 1989-1992
- PROGRAMMER/ANALYST, Independent, part-time, Colombia**
- Developed and maintained applications for spare part stores using **Informix-SQL & C** on **Unix** and **DOS**
- Purchasing, Stock Control, Sales, Orders, Deliveries, Invoicing
- PROJECT CONSULTANT, CAJA AGRARIA, head office, Colombia**
- Reputable 880-branch Colombian bank for agricultural development: banking, lending, insurance and family subsidy
- Contributed to developing "Corporate Strategic Systems Plan" in the team "Caja Agraria"- "Price Waterhouse"
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- Specified Connectivity Strategy and new Network Infrastructure
- Gathered and documented user requirements for Bank Cards, Insurance and Administrative Services systems
- Built E-R Models and detailed functional specifications
- Prepared technical terms of reference for international contract bidding processes in accordance with The World Bank regulations
- Evaluated proposals for Human Resources and Bank systems

- 1985-1989 **PROGRAMMER/ANALYST**, *CAJA AGRARIA, Systems Unit; Colombia*
- Gathered user requirements, analyzed and developed applications for different organizational areas such as treasury, finance, family subsidy, administrative services, human resources, and IS department
  - Designed E-R Models and programmed Relational DBs using **Informix** and **C**, on **Unix**
  - Developed prototype applications for users
  - Wrote **Unix-Shell** programs for installation of software and transmission of transaction data from several locations to the central site
  - Wrote technical and user manuals
  - Trained users and maintained applications
  - Maintained Cobol and CICS applications

- Jun-Aug  
1985 **PROGRAMMER/ANALYST**, *1985 CENSUS PROJECT, DANE*  
(Colombian Government's Statistical Administrative Department)
- Analyzed and developed software for:
- Early census data: to store brief census data and produce early statistical information. **DBASE III** on DOS.
  - Revising of census data: to refine census data before producing statistics.

- Feb-May  
1985 **COMPUTER PROGRAMMER**  
*ABSALON SAAVEDRA ASOCIADOS; Architectural Project Company; Colombia.*
- Designed and developed software for:
- Automatic generation of budget reports for architectural projects. Lotus-symphony's macros.

## Education

- 1986-1987 **POSTGRADUATE SPECIALIST'S CERTIFICATE** (U. of T. equivalency)  
Information Systems in Organizations  
University of the Andes, Colombia
- 1979-1984 **HONOURS BACHELOR OF SCIENCE** (U. Of T. Equivalency)  
Computer Science & Systems Engineer  
University of the Andes, Colombia

**REFERENCES:** Available upon request

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**PROFESSIONAL DEVELOPMENT**

- 1999 PowerBuilder Foundation Classes (AJJA). Java (self-taught)
- 1997 Java (Nortel)
- 1996 PowerBuilder 5.0 (AJJA). Networking Technology (self-taught)
- 1995 HTML, Networking Technology (self-taught)
- 1993 **C++**, Object Oriented & Windows programming course (145 hrs)
- 1991 Basis of AS/400; CL-AS/400; Synon-II
- 1990 Strategic Systems Planning; Insurance Market
- 1989 LANs and protocols; Telematics; CASE Tools

**PROFESSIONAL AFFILIATIONS**

Society of Latin-American Engineers of Ontario  
Colombian Society of Engineers

**OTHER LANGUAGES:** Spanish

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## Summary of Business Experience

INDUSTRY	APPLICATION
Consulting	<ul style="list-style-type: none"><li>• Corporate Strategic Systems Planning</li><li>• Requirement Gathering</li><li>• Systems functional specification</li><li>• Entity-Relationship Modelling</li><li>• International Bidding Process</li><li>• Proposals evaluation</li><li>• Implementation Assistance</li></ul>
Financing	<ul style="list-style-type: none"><li>• Financial Planning System</li><li>• Planing, Budgeting and Results Reporting System</li></ul>
Banking	<ul style="list-style-type: none"><li>• Requirement Gathering and functional specification of a Bank Cards system</li><li>• Evaluation of bidder's proposals for Human Resources and Banking systems</li><li>• Cash-position program for a Treasury Department</li><li>• Financial Statistics and Indicators</li><li>• Branch Loads and Computing Requirements Estimation</li></ul>
Data Communication	<ul style="list-style-type: none"><li>• Web server Set-up</li><li>• CGI C-programming</li><li>• HTML Web Authoring</li><li>• Demo Java program</li><li>• Informix Internetworking</li></ul>
Manufacturing	<ul style="list-style-type: none"><li>• Freight rates calculation for a Warehousing and Shipping system</li><li>• Paper manufacturing system</li><li>• Manufacturing and Distribution System for a printing company</li></ul>
Government	<ul style="list-style-type: none"><li>• Police Low-enforcement Systems</li><li>• Document Handling Cycle Application</li><li>• Requirement Gathering, functional specification and development of a Family Subsidy System</li><li>• Early Census Data Collection</li><li>• Census Data Reparation</li></ul>
Insurance	<ul style="list-style-type: none"><li>• Requirement Gathering and functional specification of a Insurance System</li></ul>
Administrative	

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Sports

- Requirement Gathering and functional specification of a Administrative Services System
- Inter-departmental mail control System
- Procedure and policy manuals Update Menu System

Architecture

- Company Sport Matches Control and Sport Cost Control System
  - Budget Reports Generation
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