

# ***Dr. William D. Bishop, P.Eng.***

wdbishop@computer.org

54 Hamel Avenue  
Kitchener, Ontario, Canada  
N2K 1M8

Home +1-519-576-6947  
Cellular +1-519-577-5245

## **Career Objective**

To obtain a research and development position with a career path in engineering management

## **Summary of Qualifications**

- 7 years of experience in research and development and 7 years of management experience
- Excellent oral and written communication skills
- Proven leadership and managerial experience
- Capable of working as a project leader, working as a member of a team, or working independently

## **Technical Expertise**

- Expert in FPGA synthesis and design using VHDL
- Expert in C programming and embedded systems design
- Expert in the use of Altera Quartus II and Altera MAX+PLUS II
- Proficient in C++, C#, and Java software development
- Experienced in the development of Windows NT device drivers
- Experienced in the use of Synopsys Design Compiler and Xilinx XACT
- Experienced in the use and administration of Windows, Solaris, QNX, and Linux
- Experienced in the design and testing of PCI and ISA bus interfaces
- Knowledge of common desktop tools and suites including Microsoft Office
- Knowledge of object-oriented design and object-oriented programming techniques

## **Education**

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|-------------------|--|
| 09/1996 – 05/2003 | Ph.D. in Electrical and Computer Engineering<br>University of Waterloo, Waterloo, Ontario, Canada<br>“Reconfigurable Computing for Mainstream Software Applications” |
| 09/1994 – 10/1996 | M.A.Sc. in Electrical Engineering<br>University of Waterloo, Waterloo, Ontario, Canada<br>“Hardware/Software Cosimulation Using Reconfigurable Logic”                |
| 09/1989 – 05/1994 | B.A.Sc. in Computer Engineering / Management Science Option<br>University of Waterloo, Waterloo, Ontario, Canada   |

## **Professional Memberships**

- Licensed as a professional engineer (P.Eng.) in the Province of Ontario
- Member of the Ontario Society of Professional Engineers (OSPE)
- Member of the Institute of Electrical and Electronics Engineers (IEEE) and the IEEE Computer Society
- Member of the International Association of Science and Technology for Development (IASTED)
- Member of the Institute for Semantic Computing (ISC)

## Professional Experience

Jan 03 – Present

### Faculty Member, ECE Department

University of Waterloo, Waterloo, Ontario, Canada

Full-Time

#### Director, Microsoft Online Learning Initiatives (MOLI) Project

- Produced online course materials, tutorials, e-learning tools, and technologies for use in online course development and delivery for 12 undergraduate courses in Electrical and Computer Engineering
- Hired, supervised, and managed 25 co-op students over a period of 5 years
- Purchased and installed an IBM Blade Server platform valued at \$175,000 for online course delivery
- Managed a total project budget of \$1,000,000
- Co-authored 1 Microsoft white paper and 2 research papers on the project

#### Lecturer

- Taught 18 undergraduate courses over the past 5 years with an average class size of 101 students and an average teaching rating of 85%
- Received the departmental teaching award for my outstanding teaching in 2006
- Published a combined total of 28 conference papers and journal papers on research over the past 5 years

#### Fourth Year Design Project Coordinator

- Organized the annual design project symposium showcasing the work of 250+ students each year for the past 3 years
- Consulted on a total of 25+ design projects
- Coordinated the design project courses
- Managed the annual budget of \$35,000
- Served as the spokesperson for the event
- Attracted national media attention and local media coverage

May 96 – Dec 03

### Computing Support Staff, ECE Department

University of Waterloo, Waterloo, Ontario, Canada

Part-Time Contract

- Administered a network consisting of 12 Sun Workstations running Solaris, 2 PCs running Windows NT, and a system of 20 Transputers
- Designed and developed a new database system for graduate student records using Filemaker Pro
- Instructed a course (ECE 324) on the topic of microprocessor systems and computer interfacing for 3<sup>rd</sup> year mechanical engineering students

Sep 93 – Dec 93

### Software Developer, Software and Simulation Group

Jan 93 – Apr 93

Atlantis Aerospace, Brampton, Ontario, Canada

Co-op Placement

- Designed, developed, and tested simulation and display software written in C for the QNX operating system to be used for Boeing 737 and Airbus A320 flight training devices
- Designed, developed, and tested the scheduling process and the shared memory implementation for the distributed simulation platform used by all commercial flight training devices produced by Atlantis Aerospace

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|-----------------|--|
| May 92 – Aug 92 | <b>Software Developer, Land Mobile Products Sector</b><br>Motorola Canada Limited, North York, Ontario, Canada   |
| Sep 91 – Dec 91 |  |
| Co-op Placement | <ul style="list-style-type: none"> <li>• Developed and tested C software for VAX and OS/2 platforms for mobile communication systems and advanced train control systems</li> <li>• Implemented a distributed problem tracking database for use by the development team within Motorola Canada</li> </ul> |

## Volunteer Experience

### Graduate Student Association – University of Waterloo

- Served as GSA President and Chief Executive Officer (Feb 00 – Apr 01) as well as on the GSA Board of Directors (Apr 99 – Apr 02) and on GSA Council (May 97 – Apr 02)
- Represented the graduate student body on all academic, political and social issues
- Managed the association staff and a team of 20+ graduate student volunteers
- Co-authored the annual report for the association
- Initiated the development of a long-range plan for the association
- Organized and promoted the 1st Annual Graduate Student Research Conference

### University of Waterloo

- Served on 35 committees at the department, faculty, and university level including the University of Waterloo Board of Governors and Senate
- Participated in the development of the University of Waterloo Tuition Policy
- Interviewed candidates for the position of Vice-President, University Relations and the position of Vice-President, Academic and Provost

### Community

- Appointed as Track Co-Chair for the Multimedia Track of the IEEE International Conference on Semantic Computing (ICSC 2008)
- Served on the program committee for the IASTED International Conference on Signal Processing, Pattern Recognition, and Applications (SPPRA 2008)
- Judged high-school student projects for the Waterloo-Wellington Science and Engineering Fair every year since 2001
- Served as the Canadian Judge for the 2005 World Finals of the Imagine Cup Software Design Competition