## **Richard Bandsmer**

Address: 2873 Grandview Crescent, Abbotsford BC, V2T 2R6 Phone: (604) 866-5617 Email: bandsmer@yahoo.com

#### **Skills**

- **Programming Languages**: C/C++, Perl, Java, Pascal, HTML, as well as some exposure to XML, PHP, Visual Basic
- Operating Systems: Unix (AIX, IRIX, Sun Solaris, HP), Win 95/98/2000/NT, Macintosh
- Databases: SQL Sybase Server, ISQL, Oracle
- **Applications/Tools**: MS Visual C++, Word, Excel, Visio, ASP.net, Rational Rose, Turbocad, Powerpoint, Framemaker, Matlab, Emacs, Vi, Winrunner, CM tools (Razor, Clearcase), various debuggers (cvd, CodeWarrior)
- Acquired Skills: object-oriented analysis, design, and software development in a team environment, UML object diagram
  notation, static code review and analysis, detail-oriented and thorough unit testing and test plan development, algorithm
  development and analysis, creative problem-solving, ability to learn quickly and to work independently, flexibility due to
  changing software requirements, proven ability to work overtime to meet aggressive schedule and budget constraints,
  technical writing, spoken and written knowledge of the German language

# **Work Experience**

#### MACDONALD DETTWILER & ASSOCIATES (05/98 – PRESENT)

RICHMOND, BC

Software Engineer (Full-time)

- Worked on several projects spanning the following domains: aviation, 3D terrain and geometry rendering, operational control software for the Canadarm, Research & Development, satellite data processing and storage, airborne radar systems
- Wrote software test procedures to cover all needed requirements, and executed them in front of the customer
- Automated software test procedures using scripts
- Extensively designed, developed, and debugged object-oriented code in MS Visual C++ and Unix environments
- Implemented and tested multi-threaded C and C++ code
- Designed GUI prototypes in Visio based on customer requirements and input, and implemented them in MS Visual C++
- Researched and implemented various 2D and 3D geometric intersection algorithms, as well as fast, accurate approximation solutions for NP-hard graph theory problems
- Mentored junior team members and worked effectively in several small, dynamic software development teams
- Resolved customer issues by fixing bugs and adding enhancements to C++ and Java GUI software
- Implemented and tested real-time embedded firmware in C
- Wrote many technical documents including detailed design documents, user manuals, technotes, and research papers
- Learned what it takes to meet very aggressive schedule and budget constraints

#### MPR EXTENSYS INC (05/97 – 08/97)

**BURNABY, BC** 

Software Developer (Co-op)

- Helped port software from one Unix platform to another (AIX 3.0 to AIX 4.0)
- Debugged C++ software in a Unix environment as part of a small team

# **CTF SYSTEMS INC** (09/96 – 12/96)

PORT COQUITLAM, BC

Software Developer (Co-op)

- Designed, developed, and tested an object-oriented module of a large C++ software program in both Unix and Macintosh platforms
- Worked well and communicated effectively in a small development team
- Learned how to use makefiles to compile, link, and build multi-file programs

#### **NORTHERN TELECOM** (01/96 – 05/96)

OTTAWA, ONT

Webmaster (Co-op)

- Wrote maintainable HTML code to produce web pages according to company specifications regarding content and layout
- Learned how to design a website that is eye-catching, informative, easily readable and navigable
- Learned how to set up access counts and server usage statistics for a website

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### **Richard Bandsmer**

#### **COLUMBIA BIBLE CAMP** (06/92 – 08/92)

LINDELL BEACH, BC

Senior Camp Counsellor (Volunteer)

- Supervised, befriended, and lived with up to eight different campers every week, 24 hours a day
- Learned to work well with fellow counsellors, support staff, and directors
- Developed good one-on-one communication and leadership skills
- Learned to exercise authority in a responsible yet sensitive manner
- Learned how to successfully resolve interpersonal conflicts

#### Education

#### UNIVERSITY OF VICTORIA (09/95 - 08/98)

VICTORIA, BC

• BSc in Computer Science/Math combined co-op program (with distinction)

### UNIVERSITY COLLEGE OF THE FRASER VALLEY (09/92 – 04/95)

ABBOTSFORD, BC

 Academic studies diploma (included courses in Computer Science, Math, Physics, Chemistry, English, Psychology, Political Science)

### COLUMBIA BIBLE COLLEGE (09/90 – 04/92)

CLEARBROOK, BC

• Two-year music diploma

## Workshops and Courses (taken at MacDonald Dettwiler & Associates)

- Object-Oriented Analysis and Design
- Advanced C++
- Java Boot Camp
- Perl Jam Introduction to the Perl Scripting Language
- Introduction to XML
- Digital Signal Processing
- Introduction to Satellite Orbits
- Craig Larman's Applying UML and Patterns: Iterative Development
- Developing Winning Proposals
- Giving Recognition
- How to be a Star at Work
- Effective Time Management
- Situational Leadership
- Developing Effective Teams
- Project Risk Management
- Moving From Conflict to Collaboration

### **Scholarships and Awards**

- 2000 from MacDonald Dettwiler & Associates: Earthwatch Quickbird Team Peer Award
- 1995 from University of Victoria: \$2000 President's Academic Entrance Scholarship
- 1995 from University College of the Fraser Valley: \$1000 Doug McDowell Memorial Math Scholarship
- 1992 from Columbia Bible College: \$600 Leadership award
- 1990 from Mennonite Educational Institute: Outstanding academic achievement award
- 1990 from Mennonite Educational Institute: \$1000 Provincial Scholarship

#### Other Notable Achievements and Interests

- Tied for first place in the 1995 Keres Memorial chess tournament intermediate section
- Won the nationally-rated 1994 Keres Memorial chess tournament amateur section with 6 wins, 0 losses
- Defeated International Master Leon Piasetski in a 1993 simultaneous exhibition chess tournament
- Won the 1989 Civic Holiday Bonanza chess tournament amateur section
- Obtained an ARCT degree in piano performance in 1992 (first-class honors with distinction)
- Taught piano part-time from Sept 93 April 94
- Volunteer work as music teacher's assistant at Clearbrook Elementary, Sept 91 April 92
- Volunteer work as rehearsal pianist for the Pacific Mennonite Children's Choir, Sept 90 April 91
- Other interests include tennis, foosball, and strategy computer games

# References available upon request