

BRIAN DE ALWIS

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SUMMARY

- 15 years software development experience, with hands-on experience with software architecture, user-centred design, and information display principles
 - Strong communication skills: has lectured and taught large groups, and mentored and coached new hires
 - Strong research skills with practical experience in performing statistical analyses, qualitative evaluation, and ethnographic studies
 - Hands-on experience in creating policy, managing unionized personnel, and maintaining political accountability
 - Dual Canadian/United Kingdom citizenship; speaks both French and English
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TECHNICAL SKILLS

- Languages (years): Java (9), C# (1.5), Bourne Shell (11), R (1.5), Smalltalk (8), C (12), C++ (4), AspectJ (3), Python (1), Objective C (1), JavaScript (1), L^AT_EX (7)
 - Software toolsets: Eclipse plug-in development, VisualAge/Smalltalk, UNIX, iPhone, XML/XSLT, Maven
 - Advanced courses in statistics, information visualization, human-computer interaction (HCI), machine learning, software engineering
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WORK EXPERIENCE

Founder: Manumitting Technologies (Sep 2009 – present)

- Currently exploring approaches for improving personal information management

Research Associate: University of Saskatchewan (Dec 2007 – Jun 2009; fixed-term)

- Re-architected and productized two academic open-source C# groupware toolkits, substantially improving flexibility and experimentation; performed code reviews
- Mentored new students, providing advice on programming, research approaches, and experiment design

Sessional Instructor: University of British Columbia (Jan 2005 – Apr 2005; fixed-term)

- Taught 3rd-year *Introduction to Software Engineering* (CPSC 310); duties included creating new course content, and setting examinations, assignments, and projects
- Topics included requirements engineering, architecture and design, software lifecycle, UML diagrams, and usability engineering

President: UBC Graduate Student Society (Mar 2002 – Mar 2003; fixed-term)

- Elected position with \$12,000 honorarium
- Represented 7000 graduate students to the university, province and nation; handled press inquiries
- Overall managerial responsibility for Society with annual revenues of approx \$700 000
- Supervised complete restructuring of financial and accounting systems
- Drafted and implemented policies
- Handled several major legal issues including lease negotiations
- Conducted employee hirings and evaluations

Smalltalk Consultant: Procedium Inc. (Oct 1999 – Feb 2000)

- Architected and implemented a flexible internet server framework; refactored company's stand-alone product to a client/server model
- Performed code reviews, design recommendations, and ENVY/Manager and VisualAge/Smalltalk support

Software Designer: Object Technology International Inc. (now IBM) (Jun 1996 – Nov 1998)

- Co-architect of a flexible, distributed computing platform named Server Smalltalk, a product supporting a range of communication paradigms from message-passing to web-computing to distributed object computing (including full distributed debugging support), across proprietary, industry-standard, and legacy communication technologies (e.g., CORBA/IIOP, Java RMI, HTTP, CICS). Scalability, robustness, and portability were of paramount importance; shipped with IBM VisualAge/Smalltalk Enterprise
 - Mentored co-op students and new-hires; advised other development teams on server and communications issues
- [Co-op work experiences omitted (1992 – 1995)]

EDUCATION

Ph.D. in Computer Science (University of British Columbia: May 2002 – Apr 2008)

- Thesis research: investigating and mitigating disorientation as experienced by software developers through sophisticated tool support for program querying and exploration. My technique unifies different sources of program information, such as static relations, dynamic run-time traces, and source code evolution, to answer questions asked by developers (Supervised by Dr Gail C. Murphy)
- Research involved using graph-based analyses, schemas, and ontologies
- Conducted three separate user studies: an ethnographic field study, a laboratory experiment, and diary study
- Courses in information visualization, human-computer interaction (HCI), and statistics

M.Sc. in Computer Science (University of British Columbia: Sep 1999 – May 2002)

- Thesis research: designed and implemented an aspect-oriented language extension to Smalltalk, named Apostle (Supervised by Gregor Kiczales)

Graduate Student Instructional Skills Workshop (University of British Columbia: Jan 2000)

B.Math (Hons) in Computer Science, minor in Combinatorics & Optimization (University of Waterloo: Sep 1991 – May 1996)

VOLUNTEER EXPERIENCE

- Director of Saskatoon-Humboldt Federal Liberal Riding Association and Saskatoon-Greystone Provincial Liberal Association
- Homework tutor (grades 2 – 6), Lord Roberts Elementary School, Vancouver (2005 – 2006)
- Member of UBC Student Information System review committee (Spring 2005), and re-appointment committee for the Dean of Faculty of Graduate Studies (2002)
- Appointed representative from the UBC Graduate Student Society to:
 - the Faculty of Graduate Studies' governance council, including serving on the Policy and Scholarships committees (2001 – 2005);
 - the UBC e-Strategy Advisory Committee, providing advice and guidance on university-wide IT projects (2003 – 2006)
- Served as a director of the Student Legal Fund Society (2002 – 2004)
- Served as representative of graduate students in the Dept of Computer Science both within the department and to the UBC Graduate Student Society (2000 – 2002)

INTERESTS, ACTIVITIES

- Member of the Association for Computer Machinery
- Enjoy reading, travelling, hiking, photography, snowboarding

REFERENCES

- References and contacts are available upon request