

# aDam Gardner

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<b>Education</b>	<b>1997 – 2002</b>	<b>University of Ottawa</b>
	B. A. Sc. Computer Engineering	
	◆ Co-op Program	
	◆ Fluent in English and French	
<b>Professional Experience</b>	<b>Application Server Specialist</b>	Royal Canadian Mounted Police 2003 to Present
	◆ Installed and supported multiple WebLogic applications and integration server environments and configured them to interact with MQ series and SQL server	
	◆ Configured IPlanet and Apache web servers to run with the WebLogic plug-in and GetAccess/TruePass	
	◆ Set up a high availability environment using Sun OS Clustering to manage Apache and WebLogic servers	
	◆ Supported a 24/7 application	
	◆ Worked in a Sun Solaris Unix environment	
	◆ Wrote shell scripts for automated support of the environment	
	<b>Computer Support</b>	Convergys 2002 to 2003
	◆ Provided technical assistance to customers using broadband cable Internet	
	◆ Studied and did troubleshooting for various aspects of computer networking	
	◆ Dealt with various operating systems including many versions of Windows and Mac	
	<b>Software Tester</b>	Catena Networks Summer 2001
	◆ Programmed tools to test a DSP tone generator software module	
	◆ Participated in code review sessions of other's code as well as my own	
	◆ Examined, tested and modified C code	
	◆ Wrote UNIX shell scripts to automate testing using various signal processing tools	
	◆ Worked with Makefiles	
	◆ Analyzed signal properties such as frequency, duration and amplitude	
	<b>Software Programmer</b>	SR Telecom Fall 2000
	◆ Programmed a GUI (Graphical User Interface) for a WL300 wireless loop telephone system	
	◆ Learned to adhere to specific programming standards	
	◆ Gained experience in the understanding of wireless telecommunication functionality and protocols	
	◆ Wrote, modified and tested scripts in Tcl/Tk	
	◆ Developed C++ code for the network management software of the WL300 using Microsoft Visual C++	
	◆ Embedded real time development in VxWorks	
	<b>DSP Programmer</b>	Communications Research Center Winter 2000
	◆ Wrote code for a DAB (Digital Audio Broadcasting) receiver under the Broadband Technologies Research division	
	◆ Programmed in C for a TI (Texas Instrument) TMS32C6701 DSP (Digital Signal Processor) in a Code Composer Studio environment	
	◆ Projects included writing many signal processing algorithms such as FFT (Fast Fourier Transform), DQPSK (Differential Quadrature Phase Shift Keying) and time and frequency interleaving	
	◆ All coding was done for both transmitter and receiver to allow for testing of thoroughness of the entire system	
	◆ Tested functions using Matlab	
	◆ Gained a more in depth knowledge of memory architecture as well as telecommunications	

<b>Professional Experience</b>	<b>Data Programmer</b>	Agriculture Canada	Summer 1999
	<ul style="list-style-type: none"> <li>◆ Translated item names between English and French</li> <li>◆ Performed data manipulation of large amounts of data (over 7000 records)</li> <li>◆ Created and managed many databases using Access and FoxPro</li> </ul>		
<b>Engineering Projects</b>	<b>Program Tester</b>	Statistics Canada	Summer 1998
	<ul style="list-style-type: none"> <li>◆ Developed test cases which were to be used in various surveys</li> <li>◆ Worked in a bilingual environment</li> <li>◆ Traced survey flow diagrams to map out all possible paths of program execution</li> <li>◆ Learned to use software such as Excel, Visio and FoxPro</li> </ul>		
	<b>Adaptive Delta-Sigma Analog to Digital Converter</b>		
	<ul style="list-style-type: none"> <li>◆ Implemented an Adaptive Delta-Sigma Modulation transmitter and receiver</li> <li>◆ Simulated various designs of Delta, Delta-Sigma and Adaptive Delta-Sigma Modulation in MATLAB and Electronic Workbench</li> <li>◆ Modulated and recovered music signals which were transmitted as infrared pulses</li> <li>◆ Implemented with a combination of analog circuitry and synthesized Verilog Code uploaded to an Altera UP Board</li> </ul>		
	<b>Estimating Realistic Performance Rates for RISC Systems</b>		
	<ul style="list-style-type: none"> <li>◆ Written in native C in a UNIX environment</li> <li>◆ Compared the performances of ULTRA-SPARC, under Sun Solaris, and PowerPC, under IBM AIX</li> <li>◆ Calculated performance measures by using Excel macros to manipulate the raw data generated by the benchmarking program</li> </ul>		
	<b>Digital Audio Broadcasting receiver</b>		
	<ul style="list-style-type: none"> <li>◆ Wrote code in C for a TI TMS32C6701 DSP using Code Composer Studio</li> <li>◆ Wrote certain modules such as the differential quadrature phase shift keying as well as time and frequency interleaver based on algorithms with which I was provided.</li> <li>◆ Used other modules such as the fast fourier transform which were provided as prewritten assembler language functions and were incorporated into the program</li> </ul>		
	<b>Inter process "talk" program</b>		
	<ul style="list-style-type: none"> <li>◆ Used send/receive/reply style commands using UNIX UDP IPC (Inter Process Communication) to communicate between concurrent processes using a client/server model</li> </ul>		
	<b>Host to host communication through serial interface</b>		
	<ul style="list-style-type: none"> <li>◆ Wrote code in assembler language for a Motorola 68K microprocessor</li> </ul>		
	<b>Simulation of a vending machine controller microchip</b>		
	<ul style="list-style-type: none"> <li>◆ Programmed in VHDL using an Altera Max Plus+2 platform</li> </ul>		
<b>Programming Languages</b>	C/C++, Java, JavaScripts, php, VHDL, Tcl/Tk, Perl, CGI, Basic, Turbo Pascal, Scheme, HTML		
<b>Computer Software</b>	MATLAB, Code Composer Studio, Altera Max Plus+2, Lab View, Microsoft Visual C++, gcc, jdk, Xemacs, vi, WordPerfect, QuatroPro, Word, Excel, Access, FoxPro, Visio, SAP, WebLogic Integration Studio, SQL Server client tools, Putty, Exceed		
<b>Operating Systems</b>	UNIX (Sun Solaris), LINUX (Fedora), DOS, Windows (95/98/2000/NT/XP), Mac (OS9/OSX)		
<b>Interests and activities</b>	<ul style="list-style-type: none"> <li>◆ Anime and Manga</li> <li>◆ Tae Kwon Do and Basketball</li> <li>◆ Created and maintain numerous web pages</li> <li>◆ Programming computer games (Monopoly, Connect 4, a racing game)</li> </ul>		