

Daniel Tse
7750-81 Ave
Edmonton, AB, T6C 0V5
Phone: 780-668-5369
Website: <http://www.DanielTse.com/>
E-mail: Dan@DanielTse.com

Summary of Qualifications and Skills

- ◆ 4 years of work experience in Biomedical and Accessibility Industry designing and developing products for people with physical disabilities and limited mobility.
- ◆ 5 years of performing technical and field support engineering
- ◆ Experienced in debugging and troubleshooting software and hardware issues
- ◆ Innovative Problem Solving Skills in analog and digital circuits
- ◆ Experienced in various computer platforms and frameworks C#, Objective-C, Assembly, C/C++, Java, iPhone OS, PHP, XML, SQL, HTML
- ◆ Over 5 years of writing technical and tutorial documents
- ◆ In depth knowledge for developing hardware software on the Microsoft Windows, Mac OS X platform
- ◆ Fluent in French and English

Education

University of Alberta, Edmonton, Alberta	1998-2002
Bachelor of Science in Electrical Engineering	
Paul Kane High School, St. Albert, Alberta	1995-1998
High School Diploma with Honours and Bilingual Certificate	

Experience

Hardware Software Engineer	2006 – Present
Madentec Limited	
<i>Member of the engineering team that designed and developed accessibility devices including: infrared head tracker, switch access hardware interface and software, and solid state keyboard.</i>	
<ul style="list-style-type: none">◆ Developed signal processing algorithm combining hardware and firmware to analyze and differentiate vibrations on an ARM core microprocessor◆ Developed wireless handshake and pairing protocol for a solid state keyboard running on a low-power embedded system◆ Completed computer accessibility program integrating a USB-driven switch access (hardware) and Apple's Cocoa Framework for Mac OS X◆ Designed and Developed a complete Integrated Development Environment to help end users and therapists program scanning menus and screens.◆ Field and Technical support for the company's line of accessibility products which include helping end users and therapists with hardware issues and customization questions, writing documentation and tutorials for resolved issues and developed test documents for products.	
Software Developer/Team Leader	2005 – 2006
Upside Software Inc.	

- ◆ Lead the development on the serialization, deserialization of the data schema
- ◆ Helped develop and instituted test-driven development practices by being the first team to put implement and standardize Test Driven Development

Co-Owner and Developer
Blueshift Innovations Inc.

2007 – Present

- ◆ Consulted clients on various web solutions available for their current workflow issues.
- ◆ Developed and integrated solutions for clients
- ◆ Managed contracting of different services to clients
- ◆ Kept company and clients updated on new technologies and solutions available

Project Leader/Designer

2001 – 2001

Electro-Oculographic Laser Pointer

- ◆ Thoroughly researched and contacted EOG experts within the area to gain comprehensive understanding of principles
- ◆ Successfully designed, implemented, and tested a laser pointer controlled by biopotentials gathered by electrodes surrounding eye.
- ◆ Designed and built circuit around the PIC16F873 microcontroller
- ◆ Wrote control program in assembly
- ◆ Helped write specifications, progress reports, final report, and presentations

Project Leader/Hardware Design

2002 – 2002

NTSC Camera Controller Project

- ◆ Helped design, build and test an FPGA capable of controlling a camera to track a person or object using real-time DSP to analyze the NTSC signals
- ◆ Lead VHDL programmer using Max Plus II and Mentor Graphics
- ◆ Helped write Specifications, Final and Progress Reports and presentations

Co-Director

1999 – 2000

Discover E Science Camp (University of Alberta)

- ◆ Shared responsibility for overall operation and direction of the Largest Western not-for-profit science camp for students aged 8 to 18
- ◆ Hired and mentored 14 instructors
- ◆ Developed training material for instructors
- ◆ Helped develop the first introductory Microelectronics Program for High School Students in Alberta
- ◆ Developed the first multimedia program for Junior High school students.
- ◆ Developed high-level web-page design (HTML, Flash, CSS) program
- ◆ Filled out grant applications and wrote proposals, final reports for projects

Honours and Achievements

- ◆ Developed Application placing First in Microsoft's "World's Best Application", 2006
- ◆ Constructed Personal Dance Dance Revolution Dance Controller Pad with software drivers for the PC, 2001
- ◆ Nominated for the Shell Award for National Teaching Excellence, 1999
- ◆ Full Alexander Rutherford Scholarship for Academic Honours, 1998
- ◆ Scored a Perfect 5 on the Advance Placement Mathematics 31 Exam, 1998
- ◆ Grade 10 Piano, Royal Conservatory of Music, 1998

References supplied upon request.