

## **Daniel Tse**

16 Wimbledon Crescent

St. Albert, AB, T8N 3J7

Phone: 780-458-5369

Website: <http://www.DanielTse.com/>

E-mail: Dan@DanielTse.com

### **Objective**

To gain experience as an engineer working in the Biomedical, Computer Accessibility and Information Technology industry enabling people to do the unprecedented.

### **Summary of Qualifications and Skills**

Communication:

- Bilingual-Fluent in French and English
- Effective Team Player and Leader
- Excellent Organizational and diverse Communication Experience
- Multiple years of working formal and informal technical support, technical tutor

Electrical and Software Engineering:

- Tested and Proven Analytical Skills in debugging and Troubleshooting
- Experienced in Project Environment and Individual work
- Innovative Problem Solving Skills in Analog and Digital Circuits
- Experienced in C#, Objective-C, XML, C/C++, Java, SQL, HTML, Flash MX, ActionScript, Perl, Assembly, Visual Basic/C++, Labview, Matlab, Pascal, Access, CADence, Microsoft Office, Windows XP/2000/98
- Clear Understanding of FPGA and DSP principles and applications
- Technical Writing: Research and Development, Documentation, Presentations, and Reports

### **Education**

#### **Bachelor of Science in Electrical Engineering**

University of Alberta, Edmonton, Alberta

#### **High School Diploma with Honours and Bilingual Certificate**

Ecole Paul Kane High School, St. Albert, Alberta

### **Experience**

#### **Hardware Software Engineer**

Jan. 2006 – Present

Madentec Inc.

- Worked on finishing up major computer accessibility program integrating a USB-driven switch access (hardware) and Apple's Cocoa Framework for Mac OS X
- Started a knowledge database for internal use and documentation.
- Represented Madentec for Microsoft's Accessibility Technology (ATG) Workgroup on Windows Vista's Accessibility developments.

**Software Developer/Team Leader** Jul. 2005 – Dec. 2006  
Upside Software Inc.

- Developed a key module after only one week at the company while learning a new framework (.NET)
- Lead the development on the design, serialization, and deserialization of the data schema. Lead a team to cover all aspects regarding the transfer of data including testing, specification drafting, planning and execution.
- Helped develop and institute test-driven development practices by being the first team to put implement Test Driven development and show other teams how to adapt to it.

**Flash Developer/Software Tool Developer** May 2004 – Jan. 2005  
WiseVillage Inc.

- Developed Kiosk tools and web applications to help customers manage their online stores using XML, ActionScript, and PHP
- Helped develop new system architecture that required moving legacy code from Coldfusion-based system to a MySQL-based RDBS and separating business logic and data.
- Participated in conference calls and meetings between designers and programmers.

**Database Developer/Web Administrator** Summer of 2003, 2001  
Alberta Foundation for Diabetes Research

- Oversaw the upgrade of Raiser's Edge Database
- Performed Technical support tasks such as network problems, printing, Microsoft Office
- Developed MS Access database with XML output to web interface
- Wrote documentation on using both the access database and Raiser's edge and various network setup solutions
- Developed Flash applications and simulations
- Assisted with website management and graphics

**Project Leader/Designer** Sep. 2001 – Dec. 2001  
Electro-Oculographic Laser Pointer

- Thoroughly researched and contacted EOG experts to gain comprehensive understanding of principles
- Successfully designed, implemented, and tested a laser pointer controlled by biopotentials gathered by electrodes surrounding eye.
- Wrote control program in Assembly for the PIC16F873
- Helped write specifications, progress reports, final report, and presentations

**Project Leader/Hardware Design** Jan. 2002 – May 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**

Dec. 1999 – Aug. 2000

Discover E Science Camp (University of Alberta)

- Shared responsibility for overall operation and direction of the Largest Western Actua camp with emphasis on Technology and Computers.
- 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
- Attended national conference to represent the camp.
- Instructed for camp from July 1998 to August 1999

**Website / Application Developer Contractor**

Jul. 1998 – Present

Daniel Tse

- Designed and developed web applications (Flash, MS Access, php/MySQL) and websites based on client's specifications and technical constraints.
- Handled all finances for the company (over 10 clients and 40 contracts) including quoting, contract drafting, invoicing, receipts, and subcontracting.
- Responsible for teaching and handing over of application, providing technical support, modifications, and meeting the technical needs of clients

**Honours and Achievements**

- Awarded First Place in Microsoft's "World's Best Application", 2006
- 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
- Bromstrom-Maltby award for Highest Amount of School Involvement, 1998
- Second Place at the Edmonton Regional Debate Tournament, 1997
- Grade 10 Piano, Royal Conservatory of Music, 1998

References supplied upon request.