# **Daniel Tse**

(780) 668-5369

Dan@DanielTse.com

@danprime

# Summary of Qualifications and Skills

- Experience in developing projects around Web Frameworks including AngularJS, JQuery, Bootstrap and PHP.
- Developed award-winning applications both privately (2006, 2012, 2013) and Industry (2008, 2010, 2012).
- 6 years designing innovative solutions in Biomedical and Accessibility Industry
- Experienced in various computer platforms and frameworks Obj-C, Assembly, C/C++, Java , PHP, XML, SQL, HTML
- Over 8 years of writing technical and tutorial documents
- B.Sc. in Electrical Engineering from University of Alberta (2002)

# Experience

## **Business Technical Consultant, Technical Director**

Signia Analytics Inc, 2012 - Present

- Provided consultation on customer behaviour analytics and business management workflow solutions
- Developed customized solutions (using in AngularJS, PHP, JQuery, and Bootstrap) for high traffic clients
- Developed Analytics Algorithm to analyze and perform customer segmentation/aggregation based on behaviours
- Analyzed and built reports to help managers and owners grow their clientele (1.5-4 fold) and increase customer management efficiency.

### **Hardware & Software Engineer**

Madentec Limited / Cleankeys Inc, 2006 - 2012

- 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.
- 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 (Envoy and Envoy Create) 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

Upside Software Inc., 2005 - 2006

Lead the development on the serialization, deserialization of Microsoft Office's Track Changes 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 - 2010

- 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**

Electro-Oculographic Laser Pointer & NTSC Camera Controller, 2001 – 2002

- Wrote control program in assembly code while building hardware around the PIC16F873 microcontroller
- Helped write specifications, progress reports, final report, and presentations
- 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**

Discover E Science Camp, 1999 – 2000

- Shared responsibility for overall operation and direction of the Largest Western not-for-profit science camp for 4000 students aged 8 to 18 in 8 weeks.
- 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 Award Winning AngularJS based applications for Samsung (2013/2014)
- Co-founder of Signia Analytics Inc, awarded Ignition Award, (Startup of the Year), by Edmonton Chamber of Commerce, 2012
- Marathon Runner/Long Distance Runner (Vancouver 2010, 2006)
- Invited to Speak on Importance of Accessibility at different events including Pecha Kucha #7 Edmonton
- Developed 1<sup>st</sup> Place Application (Notesaic) 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

## Education

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

University of Alberta, Edmonton, Alberta 1998-2002