Brant Stoede **October 8, 2014**
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Summary

- 26 years of experience in software development.
- Competent in Open XML.
- Competent in C#, VB.Net, C, LINQ to XML, and functional programming with C# 5.0.
- Competent in VBA for Office client applications.
- Competent in Java.
- 16 years of interdisciplinary engineering experience in electrical and mechanical engineering.

Currently I specialize in Open XML development in Visual Studio using C# and the Open XML SDK.

Experience

Senior Software Developer, Boulder, CO **2008 - Present**
Self-employed Consultant

- Developed many applications in Visual Studio using C#, VB.Net and the Open XML SDK.
- Built Office customizations in VBA, such as HTTPS document upload to a client's site, customizing content controls from a customXml part, etc.
- Assisted in the creation of educational content for Open XML programming.
- Performed systems and architectural analysis of factors related to health and wellness based on data pulled from peer-reviewed scientific research.
- Web application, analysis and design of qualitative and quantitative questionnaires and data.

Mesoscopic Devices, Broomfield, CO **2002-2005**
Senior Electrical Engineer

- Designed, built, and tested control SMT electronics for compact 75W solid-oxide fuel cell (SOFC) including closed loop control of fuel and air supplies, vaporizer heater temperature, etc. (Co-wrote 14000 lines of C code for the microcontroller.)
- Designed, built, and tested SMT control electronics for compact 20W direct methanol fuel cell (DMFC).
- Developed a system analysis and design tool (in Excel) for solid-oxide fuel cell systems (including electrochemistry, heat and mass transfer, thermodynamics).
- Designed and tested electronics for a methanol concentration sensor.

- Performed computational fluid dynamic modeling of a fuel cell stack, including electrochemistry.

Creare, Inc, Hanover, NH **1988-2001**
Engineer

- Developed software (Java, Fortran) for a general two-phase flow solver.
- Developed software (Java, Fortran) for modelling a rocket test facility.
- Designed, developed and tested digital signal processing electronics (Assembly, C) for noise- cancellation headset
- Developed stable force-feedback system (C++) for networked robotic control.
- Performed computational fluid dynamics modeling (C, Fortran) for gas turbines, medical instrumentation, chemical vapor deposition, clothing, manufacturing processes, etc.
- Designed, built, and tested electromagnetic drive and instrumentation electronics for 65K cryocooler.
- Designed and tested sensor for ultrasonic detection of intravenous bubbles.
- Designed instrumentation and data acquisition (C) for a high-heat transfer facility.
- Designed test facility for magnetic bearing compressor, turbine flow visualization, and high-efficiency recuperator.

Software Skills and Qualifications

Skill	Last Used	Experience
Open XML	Currently using	3 years
Office Client Developer	Currently using	3 years
C# Developer	Currently using	3 years
C Developer	8 years ago	>10 years
VB Developer	Currently using	2 years
C++ Developer	10 years ago	2 years
JAVA Developer	12 years ago	4 years

Education

B. S. Aerospace Engineering, Pennsylvania State University, 1988
B. S. Electrical Engineering , Pennsylvania State University, 1988