RESUME OF: Chris Macgowan

Chris Macgowan
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OBJECTIVE:

A challenging position as Software Engineer with an emphasis on Object Technology.

SOFTWARE ENGINEERING SKILLS:

Strong understanding of the relationships between software design, software development, user interface, product testing, implementation, maintenance, support and the many factors that are involved in developing a complete software solution.

Developed various applications running under Windows and Linux/Unix. Applied design methodologies and wrote technical specifications using OOAD artifacts and UML. These applications were developed using Java, C++, STL, C#, .NET, MFC, ATL and COM. Web Technologies include Java, HTML, PHP, jQuery, JavaScript and CSS. Developed, documented and applied automated tests using Java, C#, C/C++, JUnit, PERL, Selenium, Ranorex and WinRunner.

Database experience includes MySQL, Oracle, Microsoft SQL Server, DB2/2, Informix and Microsoft Access.

Developed firmware and hardware for embedded systems based on 8-bit microprocessors/microcontrollers.

Member and/or leader of various software development teams. Helped develop in-company standards for quality processes, design methods, test procedures and product specifications. Coordinated and managed product testing and support. Authored and edited user and technical documentation.

EMPLOYMENT EXPERIENCE:

Thomson Reuters Legal
Contract Software Engineer
August 2013 to January 2015
Eagan, Minnesota

Member of the Platform Quality Assurance Automation Group (QED), responsible for design, development, testing and implementation of software components to support test automation for various Legal Platform Software Products.

Lead a small team that designed, developed and tested the RetroLoad Test Automation Application. The RetroLoad Process was designed to move legacy data from a mainframe system into Oracle databases. The RetroLoad Test Automation Application validated the transformation output XML. The validation was achieved by parsing the XML file for mnemonics. The mnemonics are mapped to XPath that are used to validate the output XML files. Process results are stored in a database. The application communicated with the transformation

processes using the Java Message Service. The application was multi-threaded. The application was written using Java. The RetroLoad Test Automation Application produced business reporting of mnemonic validation errors and process metrics. Authored user and technical documentation.

Working with the Judicial Workbench Team, responsible for design, development, testing and implementation of software automation components to support the Judicial Summary Application. The test automation classes were written in C# and added to the Ranorex Automation Framework. Wrote helper classes to implement test data, object identification and support of REST services. The automation components were integrated into AnthillPro to support a continuous integration build model.

Independent Projects
Software Engineer / Media Production
February 2012 to Present
Eagan, Minnesota

Chris and his family returned from Berlin in December 2011. Chris is working on a number of independent software engineering and media production projects. These projects involve web applications, mobile applications and media production. Technologies used to implemented projects include: Objective-C, Java, JavaScript, CSS, HTML and MySQL.

Mister Spex GmbH
Senior Software Developer
June 2010 to December 2011
Berlin, Germany

Mister Spex is an online retailer of prescription glasses, sunglasses and contact lenses.

Participated in a team responsible for design, development, testing, implementation and maintenance of application software to support features for the Mister Spex online store and back-office processes.

Worked with Software Engineering, QA and Product Owners to design, develop and implement a test automation platform. The platform was implemented using the SeleniumHQ (WebDriver and Grid2) web application testing system. The platform uses a database to allow test cases to be created, configured and scheduled. The management daemon and test cases were written using Java.

As a member of a Scrum Team, I worked with Product Owners and clients to design, develop and implement software solutions for the Mister Spex online store and back-office processes. During the analysis and design phases used OOAD methodologies and UML artifacts such as Use Cases, Class, Collaboration and Sequence Diagrams. Server components were written using C++, STL and data access frameworks to expose data from MySQL. Client components were written using HTML, jQuery, JavaScript and CSS.

Worked independently to design and implement a dashboard web application used to display real-time product sales data. The application was implemented using an existing C++ database framework to expose data objects from MySQL. The server side application was written using C++ and STL to handle http requests from the client and return data to the client to support Ajax. The client application was written using HTML, jQuery, JavaScript and CSS; again supporting Ajax.

Independent Projects
Software Engineer
July 2008 to June 2010
Berlin, Germany

Chris and his family moved from Saint Paul to Berlin in July 2008. While seeking full-time employment, Chris worked on various independent software engineering projects. These projects involve interactive web

applications, database applications and desktop utilities. Technologies used to implemented projects include; C++, Java, JavaScript, CSS, PHP and MySQL.

Meteorlogix LLC
Software Engineer
May 2003 to Jun 2008
Minneapolis, Minnesota

Member of the Data Development Group, responsible for design, development, testing and implementation of software components to support data acquisition, infrastructure and product development for Meteorology Software Products in a Windows and Linux environment.

Designed, developed, tested, documented and implemented various data acquisition components. The components handled various weather data provided by the National Oceanic & Atmospheric Administration (NOAA), National Weather Service and third parties. Prior to this implementation data acquisition requirements were added directly to specific applications. Using components allows the components to be reused and improved maintenance. The components were designed using OOAD methodologies and UML artifacts such as Use Cases, Class, Collaboration and Sequence Diagrams. The data acquisition components receive data using a file or socket. The data is then parsed and written to a database table using ADO. These software components were build as MFC or ATL dlls using Microsoft Visual C++.

Worked with engineering, client and support teams to design, develop, test, document and implement the Xml Ingest Application. The Xml Ingest Application provided the functionality to load xml data from a file, ftp or http stream into a database table using the Microsoft SQLXML Bulkload Component. New input sources and target tables were implemented using a configuration table. Created classes and methods to support user interface, configuration, thread management and general operation. The application was written in C# using the .NET Framework.

Designed and developed the Bloomberg Contribution File Manager (Bcfm). The Bcfm Application added header information to the top of datafiles being processed. Using OOAD methodologies and UML artifacts designed the classes used in the application. The Bcfm Application was built using C++ and STL on the Redhat Linux Operating System. Common components were built into Shared Objects.

As a Member of the Infrastructure Group developed software development guidelines, infrastructure components and created a class library. The software development guidelines were a collection of documents outlining best practices in software engineering. Identified and initiated a collection of shared components. The component interfaces were documented and published in a class library. Tasked with research of best solutions to collect process metrics and implement process control into the data processing environment. Completed prototypes of a metrics collection component, metrics server and a peer-peer process control component.

EMPLOYMENT EXPERIENCE (1985 - 2004)

The following is an overview of employment experience from 1985 to 2004. All employers were in Minneapolis or Saint Paul Minnesota unless otherwise noted. Full employment details can be found at the following link: http://www.macgowan.com/software_employment.php

Independent Consultant (Software Engineer)
October 2001 to September 2004

Working with software and hardware engineering teams at Telex Communications Incorporated; Designed, developed and tested the RE-OneLink Wireless Receiver Controller. The RE-OneLink is a Windows application that monitors and controls wireless receivers. Worked with marketing and engineering to develop product specifications. Classes were designed and written to support USB communications, receiver data, receiver

events, event monitoring, error handling and the GUI presentation. Created the InstallShield application. The application was written using Visual C++ and MFC.

Member of a engineering team for Colder Products Corporation; Designed, developed, tested and implemented the HostController Windows Application to control and collect data from an embedded system. The HostController was designed to exercise the embedded system and provide a sample data acquisition application to demonstrate the embedded systems capabilities. Classes were designed and written to support RS-232 serial communication, data collection and management, embedded command processing, error handling and the GUI presentation. The HostController Application was written using Visual C++ and MFC.

VERITAS Software Corporation (Staff Software Engineer)
March 1999 to May 2001

Participated in a team responsible for design, development, testing and implementation of software features for the VERITAS NetBackup Product. These features supported the backup of Lotus Notes and general client enhancements.

Designed and developed an enumeration component to identify Lotus Notes Objects for backup on the client. This software component used the Lotus Notes API and the NetBackup Universal Browsing System to create a list of objects that is sent to the server for backup. Worked with Test Engineering to design, develop, document and apply automated test scripts using PERL to test component. This software was written in C to provide platform independence between Windows and Unix.

Target Corporation (Senior System Developer)
October 1994 to March 1999

Member of various teams responsible for software design, development, testing, implementation and support for software systems in Target Stores. This environment included 800 stores, each with a single server running Windows NT and many clients.

Applied object oriented techniques to develop common business classes to be re-used in the general retail operating environment. These classes supported data access, messaging, process control and event logging. Created test applications to verify business rules of each object. The client application and business objects (server) were developed using Visual C++ and MFC.

Higher Education Assistance Foundation / TGA (Software Consultant)
June 1992 to August 1994

Developed, maintained and provided end-user support for human resources, inventory and loan management client-server systems written in Clipper, Power Builder and C. Authored end-user documentation.

Siemens AG (Software Engineer)
Jan 1991 to February 1992, Berlin Germany

Designed, developed, implemented and supported the Quality Assurance Management System. The application was designed to collect, maintain and report on quality assurance data collected during the production.

Carl Duisberg Gesellschaft e.V
May 1990 to February 1992, Berlin Germany

The Carl Duisberg Gesellschaft is a cultural exchange program between Germany and the United States. I was accepted into the Engineering Program for Young Professionals. During this time I studied German Language and Culture, lived with a German Family and began work for Siemens in January 1991.

Compucon Corporation (Design Engineer)
January 1989 to April 1990

Designed, developed, implemented and supported custom electronic control systems. Authored user and technical documentation.

Smarte Carte Incorporated (Design Engineer)
December 1985 to January 1989

Designed, prototyped and tested three microprocessor based embedded systems for luggage cart rental systems in airports.

PERSONAL INFORMATION:

Nationality: United States.

Language: English, German (Intermediate fluency).

Education: Associate of Science (A.S.) Degree in Filmmaking (60 credits completed)
Minneapolis Community College, Minneapolis, Minnesota, 1994

German Language Courses (16 credits completed)
University of Minnesota, Minneapolis, Minnesota, 1990

Bachelor of Science (B.S.) Degree in Electronics Engineering Technology
Mankato State University, Mankato, Minnesota, 1985.

Interests: Electronics, Filmmaking, Biking, Reading and Writing.

References will be provided upon request.
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