

Resume of Todd “Mac” McDonald

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OBJECTIVE

I am searching for a progressive organization that would benefit from my broad technology experience and wide-ranging management skills. It is my desire to find a role where I can provide innovative solutions to challenging problems.

EDUCATION

Univ. of Central Oklahoma, Bachelor of Science, Computer Science, 1989

EXPERIENCE

Steam Power For Kids, Director & Mentor **10/18 – Present**

Founder of a non-profit to offer after-school STEM education to Kids ages 10 to 18. Formed an alliance with a local engineering firm to sponsor and host a streaming classroom and maker lab facility for a Live Streaming STEM program. Worked with local businesses and vendors to build-out the lab with computers, test equipment and software tools. Partnered with local high school to become a mentor for their FIRST robotics team. Coding in Scratch, C++, Python and Java. Built a multimedia streaming curriculum for robotics, coding, electronics and digital media.

Entech Innovative Engineering, Controls Manager **6/18 – 6/21**

Built a controls group to provide automation expertise for electro-mechanical engineering projects. Design and wiring of automation technologies including various Programmable Logic Control systems which incorporated various pneumatics, motor drivers, relays, switches and sensors. PLC Coding in Ladder Logic, C and Java. Communication and control over various Ethernet protocols.

TriArc Solutions Inc, Founder and President **10/10 – 12/17**

Founder of a technology consulting firm which specialized in the design, implementation and customization of OpenLink’s RightAngle enterprise CTRM(Commodity Trading and Risk Management) software system. The company grew to eighteen consultants with annual revenues of 5 million dollars. Our clients included Chevron, Phillips 66, Western Refining, PBF Energy, Musket (Loves) Corp., Marathon Oil and Gulf Oil. Our consultants possessed expert knowledge in the complete Energy and Commodity products life cycle, including leases, transportation, storage, refining, sale contracts, product pricing, exchange traded deals, risk management, financial reporting and accounting interfaces, which enabled them to work closely with a wide variety of client and vendor representatives. For four years, I worked as the development team lead for the OpenLink Right Angle implementation at Chevron Corporation in Houston. My technical responsibilities included; an Object-Oriented C#.NET development of a legacy data extraction and MS-SQL Server data loading application for the new application, development of a WPF C# web application for application support and alert notifications, development of Web Services in Java and C#.NET, and customizations of the distributed C#.NET application. In 2016 I sold my ownership, however, the company is a going concern and additional information can be found at the website www.triarcsolutions.com.

RightAngle Consultant, Sr Developer/Team Lead **11/06 – 9/10**

Independent consultant and senior developer for OpenLink/Solarc's RightAngle Commodity Trading and Risk Management enterprise software solution. Team leader on implementation and customization projects for OpenLink's RightAngle software, which included knowledge in well leases, transportation, storage, refining, sale contracts, fractioning, product pricing, exchange traded deals, risk management, financial reporting and accounting interfaces. Data import APIs were developed in C# and Java. The system was based on a Service Oriented Architecture / N-Tier distributed architecture utilizing web services in C# and Java for data delivery. Key technologies utilized included MS.NET(C#), SQL Server, and XML. Clients included major energy companies; Murphy Oil, SimGroup, Phillips 66, Conoco, and Chevron.

TV Guide, Consultant, Senior Developer **7/06 – 10/06**

Contracted as a consultant and developer to complete an ASP.NET web application for delivery of television content metadata. All data transport, retrieval and updates, were transferred via Web Services. The software was built in C# on the Windows .NET Framework. The core design was Service Oriented Architecture and Model, View, Controller on the handheld. All requirements and specifications were designed and created using Enterprise Architect.

Hertz Rental Car, Consultant, Tech Lead & Developer **1/06 – 6/06**

Contracted as a consultant and technical lead to complete a Win CE handheld application, which allowed for the check-in/out of rental cars. The handheld app integrated with a Java distributed web application. All data transport, retrieval and updates, for the handheld devices were transferred via Web Services. The handheld software was built in C# on the Windows .NET Compact Framework. The core design was Service Oriented Architecture and Model, View, Controller on the handheld. All requirements and specifications were designed and created via UML.

Dollar Thrifty Automotive Group, Sr Developer **4/05 – 1/06**

Employed as a Sr. Developer, I developed code components in C and C# for Microsoft BizTalk 2002 and 2004. These components were used to process EDI data received from remote locations. All EDI data was converted to a standard XML format and then de-serialized into classes for processing. This code used Microsoft's Enterprise DAL with SQL Server tables and stored procedures.

Other responsibilities included, development team member on an n-tier WinForm reservation application developed with C# .NET. I created Use Case/Class Diagrams in UML, generated C# classes, created Web Services, and designed the SQL Server databases and stored procedures for the application. Additionally, I was tasked to design and code a new approach to enterprise application security based on Active Directory credentials. I built a login/authorization window utilizing a singleton user object in C# using Active Directory for authentication. This utilized Authorization Manager, Microsoft's MMC management snap-in tool, to create groups, roles and operations for valid Active Directory users.

MacDonnell Software, Sr. Architect and Project Lead **8/03-3/05**

Senior developer to design, develop, and market a leasing and property management software application known as Property Keeper. My experience included designing the relational database model in the database modeling tool Erwin, implementing the database in Sybase SQL Anywhere, and developing the client code in PowerBuilder 5.0 with PFC. The application features a two tier approach with re-usable business logic objects. In 2004, I migrated the software to PowerBuilder version 7.0 with PFC (class library). The application functionality included; sales, invoicing, payables, tax reporting and a suite of financial reports.

Williams Communications, LLC, Consultant and Sr. Developer 11/01-9/03

Employed as a senior analyst and developer on a client/server n-tier and web based application. The application provided booking of radio and TV advertising spots, satellite and internet delivery of spots, physical duplication of spots, shipping and receiving of media, and customer billing. The databases utilized were Sybase 11 and Oracle 8.

Responsibilities included database modification, creating FTP scripts for EDI file transfers, PowerBuilder framework enhancements, client and object code development in PowerBuilder 6.5 with the PFC framework, web code development in Microsoft ASP.NET/C#, design of an XML schema and parser for data transport, stored procedure and trigger development, integration with FedEx servers/API for custom shipping and labels, development of an Airborne Express API interface for custom shipping and labels, and Zebra barcode printer integration using ZPL.

My industry knowledge in ordering, shipping, receiving, warehousing, bar-coding, and accounting assisted me in this role, while I learned new industry knowledge in advertising and media duplication.

Equential Technologies, Inc., Founder and Development Mgr 9/99-7/01

One of three founding partners in a technology company that provided wireless enterprise software solutions for the Product Fulfillment, Warehouse and Shipping industry. We developed a suite of mobile handheld applications, which ran on Symbol and Palm handheld scanners. The applications were designed to seamlessly integrate with JD Edward's One World ERP enterprise solution.

Initial responsibilities included analysis of wireless markets, analysis of wireless hardware, discovery of software tools, and proof-of-concept development. I performed the role of senior programmer and development manager for our first product, a handheld warehouse automation, picking, shipping, and receiving system. Later, I determined the project architecture, technology and development standards. My technical role included managing a team of four developers and two implementers.

As a Technical Manager/Architect, I designed and built the relational data model for the project using Erwin 3.0 and implemented the model utilizing MS SQL Server 6/7. My design responsibilities included the initial design of PowerBuilder business logic objects, modifications to the PFC application framework, implementation of a combined transaction architecture, and design of a multi-threaded object process server. I completed front-end client programming in Visual Basic 6 and PowerBuilder 7, with an ASP companion application for the internet. I utilized ADO, datawindows, and stored procedures for SQL Server interfaces and developed VB COM objects for the data interoperation with the JD Edwards ERP AS/400 system. I also developed custom Zebra printer APIs using ZPL.

As a programmer lead, I specified handheld GUI standards, designed TCP/IP communication protocols for server connectivity, and developed handheld software for both Palm OS and Windows CE platforms. I developed three handheld programs with eMbedded Visual Basic and C++, using ADOCE and ADOXE against a SQL Server for Windows CE database. The hardware used for development was Symbol and Intermec wireless handhelds computers (Palm and CE). Software tools that I have used in the this role include; PowerBuilder, Erwin, DB Artisan, SQL Programmer, SQL Advantage, MS Project, ASP, MS Visual Basic, embedded VB and C++, Odyssey Software's handheld server and Visio.

RightAngle Consultant and Developer**11/95 - 8/99**

Independent consultant and developer for OpenLink/Solarc's RightAngle Commodity Trading and Risk Management enterprise software solution at various energy companies.

Williams Energy contracted me as an analyst and developer for enhancements to a gas marketing software package. My responsibilities included modifying custom interfaces between the gas marketing system and backend financial system. I also created and modified stored procedures for both SQL Server and Oracle databases. Development was done in PowerBuilder 6.0 with the PFC framework. Migration of PowerBuilder PFC application from version 5 to version 6.5.

Koch Industries contracted me as an analyst and developer of a mission critical natural gas liquids client/server system serving 70+ users. Functions of the system included production, transportation, processing, marketing, distribution and transmission of accounting data to legacy systems. I worked on a team of 12 developers. The client application was written in PowerBuilder 4 utilizing a custom framework and object library. The library was enhanced throughout the project. The database was modeled in Erwin and implemented in Sybase 10. I wrote triggers and stored procedures using T-SQL.

Solarc Inc., Software Developer**8/94 - 10/95**

Analyst and developer of a mission critical natural gas liquids client/server application named righthANGLE. The system served 30+ users with a large daily transactional volume. Functions of the system included transportation, marketing, and transmission of accounting data to legacy systems. The application was modeled in Erwin, proto-typed in PowerBuilder 3 and written in PowerBuilder 4. The database was implemented in SQL Server 4.x. I helped to create the GUI guidelines for the project, a custom application framework and an object library.

Perot Systems Corporation, Software Developer **12/92 - 8/94**

Employed to modify and improve an existing WAN communications application written in C under VMS on a DEC VAX. The application ran in a nightly batch and dialed 140+ remote locations via modems, downloading daily financial information from each into a flat file. I extended the system by designing and developing a Visual Basic 3.0 client/server system to store and view information relating to each remote site. Microsoft Access was used as the database.

MISCELLANEOUS

Operating Systems: Windows 3 to 10, Mac OS X, Linux (Debian), VMS

Development Languages and Tools : C#.NET, C, C++, Java, Python, ASP and ASP.NET, HTML, Javascript, PHP, PowerBuilder 3-8, Visual Basic 3-6, Assembly, Basic, eMbedded VB/C++ for WinCE, XML, MS BIZ TALK 2002/2004, Visual Studio, Eclipse, Visual Source Safe

Databases: MS SQL Server 4-2012, Sybase 7-11, Oracle 8, Sybase SQL Anywhere, mySQL., MS Access

Database Tools: SQL Programmer, Erwin relational modeling, TOAD, SQL Debugger

Modelling and Project Tools: Rational Rose, Sparx Enterprise Architect, MS Project, Visio

REFERENCES

Sterling Carmean, President, Triarc Solutions

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