# Mike Mohrbacher – Professional Resume

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# Experience

### I have worked as an independent software architect and developer since 1996 at [Black River Systems, Inc.](http://www.blackriverinc.com/company-profile.html) I bring with me extensive experience recommending and implementing technology that augments my clients' business practices. During my thirty-plus year technical career, I have held senior consulting roles in the financial, scientific, and insurance industries.

### I like what I am doing. Software is my craft. I have been doing it for a long time and I have gotten really, really good at it.

## Summary of Skills

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| --- |
| Very Experienced |
| .NET, C#, ADO.NET, LINQ, SQL, Entity Framework, Git, MVC |
| Experienced |
| SQL Server, JavaScript/Typescript, JQuery, IIS, JQuery, Razor, CSS, HTML, ASP.NET, Sockets, C++, COM, Octopus |
| Competent |
| Angular, .NET Remoting, WCF, Azure, SGML, XML, C |

## July 1996 - Present [Black River Systems, Inc.](http://www.blackriverinc.com/blackriverinc.html) - Principal Consultant

### October 2018 - December 2018: Allstate

Develop repairs to security faults identified by penetration testing team.

(ASP.NET, C#, OWASP)

### January 2018 – August 2018 [Code Advantage](http://www.codeadv.com/)

Responsible for modification and development of web-based interface to a mentoring management system for faith-based organizations.

* Modified existing plug-in and application to schedule subscription payments by ACH Debit.
* Developed full-stack plug-ins to restrict logons per business requirements.
* Fixed behavior and styling issues with web-site.

*(CSS, JavaScript, JQuery, HTML, SQL, PHP, WordPress, Git, AngularJS, Bootstrap)*

### October 2017 - December 2017 [Thomson Reuters](https://www.thomsonreuters.com)

* Led team of self and 2 other developers. Managed work assignments and workflow throughout development process.
* Analyzed design requirements and existing code.
* Designed and developed classes to implement socket communication's SDK in C#/.NET Core.
* Designed and developed test application to receive real-time price data from market feed.

(.NET, C#, Git)

### November 2015 – July 2017 Intelligent Medical Objects

Developed full-stack, web-applications to support development and delivery of IMO's proprietary medical terminology content. Responsibilities included creation and configuration of software delivery systems.

Designed Single Sign-on workflow for internal web-sites.

As a member of the Architecture Community-of-practice board, reviewed and promoted effective software engineering techniques throughout the organization.

(NET 4.0 C# WebAPI MVC JQuery LINQ JavaScript Razor Angular ASP.NET CSS HTML Octopus Oracle Dapper Entity Framework SQL IIS7 Git Postman)

### March 2015 – November 2015 Horizon Pharmaceuticals

Replaced unsupportable and inflexible technologies with modern software techniques and technologies. Designed and developed access control system. Introduced software source control mechanisms and procedures. Created installation packages for software delivery. Scope of responsibilities included analysis, design, development, testing and deployment of repairs to existing system and replacement of current implementations. (.NET, C#, SQL, IIS, SSRS, Razor, SQL Server, Entity Framework, Git, CSS, JQuery, JavaScript, Bootstrap, PGP)

Sales Operations Roster

* Review design requirements with user-community.
* Design and development of front-end and back-end of new web-site.
* Redesign, development and deployment of reports onto SQL Server Reporting Services (SSRS) platform.
* Redesign of database schema.
* Redevelopment of integration with HRIS system

Aggregate Spend Integration

* Assured and auditable delivery of data between third-party expense reporting system and [MedPro AggregateSpendID®](https://www.aggregatespend.com/public/index.asp) system.
* Extraction and delivery of data from corporate database to [MedPro AggregateSpendID®](https://www.aggregatespend.com/public/index.asp).

### November 2014 - January 2015: Allstate

Developer of internal web-site for workflow automation. Site captures work requests and passes them to TIBCO messaging system. (.NET, MVC 4, C#, JQuery, JavaScript, AJAX, Razor, CSS, HTML, Oracle, SQL, IIS 6)

* Design and development of access control framework.
* Mentoring of MVC model-binding and data annotations concepts to the development and support teams.
* Front-end development of responsive web-pages.
* Server-side programming of web-page processing.
* Programming of complex business layer logic.
* Programming of database service layer and SQL queries.
* Solution of programming conundrums for the development team.
* Diagnosing and repair of IIS configuration issues.

### May 2014 – July 2014: Ogilvy & Mather Advertising

Developer for a major consumer product's web-site. (CSS, JQuery, JavaScript, C#, XML, ASP.NET, MVC 2.0, SQL Server)

* Front-end development of responsive web-pages.
* Server-side programming of web-page processing.
* Server-to-server interface to a third-party customer-service vendor.

### August 2014 – October 2014,

### February 2013 – April 2014: Shift - Communication Supply Chain Solutions

Architect and developer of a web portal for sale and distribution of marketing materials to Bridgestone / Firestone dealerships. (MVC 4.0, C#, JQuery, AJAX, Razor, SQL Server 2012, IIS 7)

* Team leadership.
* Front-end development of the retail web-site's active content.
* Back-end architecture and development of server's actions, business logic, and database interface logic.
* Front-end and server development of administration site's controller and business logic.
* Database schema design.
* Global database interface logic including connection and data-access layer.
* Architectural design of batch processing sub-systems.
* Web-site and database deployment.

### November 2012 – June 2013: Nancy Mohrbacher Solutions

Technical project management for Breastfeeding Solutions phone application (25,000+ downloads).

### November 2012 - January 2013: Astellas Pharma US, Inc

Maintenance developer for internal web-portal to accept, manage, and track personnel change notifications. (C#, MVC, ASP.NET, SQL Server, ADO.NET, Linq, WCF, SAP)

### April 2012 - October 2012: CDW

Software development of proprietary batch, web, and workstation applications for support of client's sales and marketing functions. Responsibilities included technical analysis, development, and deployment across a broad mix of technologies and methodologies in a dynamic environment. (C#, .NET 3.5, 4.0, SQL Server 2005, ASP.NET 2.0, FTP, TFS, HTML with Prototype JavaScript Library, Windows Forms and ASP.NET Controls, DB2 on iSeries)

### January 2012 - March 2012

Sabbatical to recharge, spend time with family, develop small projects for friends, and self-education.

* Develop a custom web-site to accept equipment rentals and service requests for Lact Corp Solutions, a vendor of Ceridian, Lifeworks. (C#, ASP.NET, MVC2, Azure)
* Consulting software engineer for Digital Acoustics, a vendor of IP intercom systems and their clients. (C++, C#)
* Developed and deployed a personal Azure web-site and service. (WCF, Azure)

### January 2009 - December 2011 Incept Consulting

June 2011 – December 2011

Co-architect of online report presentation system. The goal of the project was to periodically collect large volumes of data from several sources in disparate logical formats and expose them through an SSRS portal. The challenges were the large (50+) variety of logical record formats combined with the short timeframes (5 months). The consulting project team consisted of me as architect, another senior developer as co-architect, and two software technicians.

* Design software and data architecture.
* Develop input data editors and report table loaders (SQL Server DDL and DML, C#, XML, XPath, Powershell)
* Supervise and train software technicians in use of SQL Server, SSRS, Monarch data parser, Team Foundation Server, Business Intelligence Studio 2008.

January 2009 – May 2011

Working as a software developer to modify and extend custom Window Forms and ASP.NET workflow management system for background-security vendor.

* Modifications and enhancements to reporting sub-system.  (SQL, VB.NET, XML, XSLT, DOM)
* Design and development of extensions to workflow management system (C#, LINQ, ADO.NET, Entity Framework 4.0)
* SQL Server performance tuning and query optimizations. (SQL Server, Performance Monitor, DMV)

Environment: .NET 4.0, 2.0, 1.1, C#, SQL Server 2008 R2, Entity Framework, LINQ, Powershell, VB.NET, ADO.NET, TFS, SQL Server 2005, ASP.NET, XML, XSLT, DOM

### November 2008 - January 2009 NCSBN

* Rewrote document distribution program using [secure FTP package](http://www.enterprisedt.com/).
* Added XML transforms to replace BizTalk. Environment: VB.NET, SQLServer 2005, XML, DOM, JScript, FTP

### October 2006 - November 2008 Options Clearing Corporation

Lead designer, architect, and developer for Bloomberg real-time price feed and cache.

* Multiple price feeds accept and parse Bloomberg events to extract trades, quotes, and closing prices, (C++, Bloomberg B-Pipe Broadcast)
* Shared, in-memory cache stores prices and volumes, (C++, templates, DCOM)
* Real-time price feed performance data published through Microsoft Performance Monitor (C++/C#, Shared Memory),
* Software built, tracked, and deployed to multiple price feed machines, price cache, and price clients. (VS 2005, SubVersion, MS Installer, JScript, XML)

Development of software for options clearing applications. (C++, MFC)

Environment: C++, DCOM, C#, SQLServer 2005, MFC, WinForms, JScript, XML, Perl

### March 2007 - April 2007 IsoSoft Solutions

Development of Office Automation program to generate Word documents from templates and database tables.

Environment: C#, SQLServer2K, Office Automation

### February 2006 - October 2006 Progeny Dental

Development of imaging application for dental x-ray radiography suite.

* Iso-density image colorization control (.C#, LEADTools Medical Toolkit, .NET Component)
* Patient database application (C#, ADO.NET, SMO, WinForms)
* Annotation markup of radiographic images (LEADTools Annotations)
* XML Serialization of LEADTools filter commands

Environment: C#, .NET 2.0,  XML, ADO.NET, SQLServer 2005, WinForms, LEADTools Medical Toolkit & Annotations, Server Management Objects (SMO)

### December 2005 - March 2006 IsoSoft Solutions

Enhancement and development of schedule management system for major transit system.

Environment: .NET, SQLServer2K, WinForms, Reporting Services, VB.NET

### December 2002 - November 2005 Bio-Imaging Research

Design and develop software infrastructure and GUI components for industrial and medical X-ray control systems.

January 2005 - November 2005 Project Leader

Write software requirements. Define and estimate software development tasks for system. Design and review design of software components. Troubleshoot system operation. Write software components. Create and maintain software "build" system for project.

* X-Ray inspection-gauge system (.NET, C#, WinForms)

December 2002 - December 2004 Software Project Engineer

* Remote data publication system (.NET, C#, C++, TCP/IP Sockets)
* Dynamic class-loader (.NET, Remoting)
* Client and Server socket interfaces (C++, C#, .NET, TCP/IP, Multi-threaded).
* System control through Allen-Bradley Programmable Logic Controller Driver (OPC, COM).
* Job control GUI and queue management sub-system (C#, .NET, WinForms)
* [XML-Schema design](http://home.comcast.net/%7Emrmohrbacher/XML_Documents-Schemas-Namespaces.html).
* XML data access layer.
* Operation Sequencer to control the process of performing X-ray scan (C++, COM).
* Object-storage system and API for very large, multi-part data sets (C++, Templates, Generic Programming).
* User interface program for Sequencer (C++, MFC).

Environment: C#, .NET, Remoting, WinForms, VC++, COM, Generic Programming, C++ Templates, multi-threaded, STL, TCP/IP, WindowsXP, MFC, OPC, XML, XML Schema

### June 2002 - November 2002 Technium

Team leadership. design and development of sophisticated .NET Web applications and services for integrated re-insurance system. Integrated MSMQ and ADO.Recordset transactions.

* Framework design and application development of rule-based policy quote component. (.NET, MSMQ)
* Process, class design and SQLServer stored procedures to bind quoted application as XML datasets to policy database. (XML, SQLServer)
* Schema-driven code generator to load insurance-quoting rule tables (C#, .NET Reflection).
* Write and repair web pages (ASP.NET, ADO.NET, HTML).

Environment: .NET 1.1, ADO.NET, ASP.NET, XML, XML Schema, C#, VB.NET, SQLServer, WindowsXP, Windows Services, Web Services, MSMQ

### January 2002 - May 2002 Matlock Capitol, LLC

* Development of system infrastructure components for automated trading system.
* Debug high-throughput price-feed system.

Environment: VC++, COM/ATL, C++ Templates, Multi-threaded, Windows NT4

### April 2000 - January 2002 ArialPhone, LLC

Co-design functional interface and systems architecture as well as software engineering of voice-controlled telephone.

* System architecture and design analysis of infrastructure.
* Design and programming of USB and telephone control modules.
* Troubleshooting and diagnosis of embedded firmware and USB interface.

Environment: VC++, COM/ATL, Multi-threaded, Windows 2K/98/ME, USB, Microsoft Installer

### December 1998 - December 2000  The Art of Breastfeeding, Inc.

Site engineering and management of retail internet site.

Environment: UNIX, HTML

### March 2000 EthnicGrocer.COM

Database support and administration.

* Produced ad-hoc reports,
* Wrote stored procedures.

Environment: MS SQLServer, TransactSQL

### July 1998 - February 2000 McKesson-HBOC

Software engineering of surgical management package.

* Design team leader for key architectural interfaces of surgical management system.
* Task definition and time estimates for development of security sub-system.
* Programming of security sub-system.
* Architectural and design oversight.
* Database table and server procedure consulting, design, and development.

Environment: VC++, COM, Windows NT 4.0, MS SQLServer, ODBC

### June 1997 - June 1998 Wheels, Inc.

Programming for vehicle leasing orders system.

* Development of interactive and batch programs.
* Development of business-rule components.
* Development and optimization of database server procedures.

Environment: Windows 98, MS SQLServer, Transact SQL, ODBC, ADO, VC++, COM/ATL, Visual Basic

### Sept 1997 - May 1998 Science and Arts Academy, Des Plaines, Illinois

Teaching programming in Java to ages 13 through 17 at private school for gifted children.

Environment: Windows 98, Java, Visual Cafe

### July 1996 - May 1997 William M. Mercer

Developed integrated Voice Response/Web employee benefit enrollment system for Dell.

* Web site development, systems administration, and network configuration in Windows-NT environment.
* Integrated web and VR database design and stored procedures (SQLServer, Sybase, dbLib)
* Design and coding of Web server-side scripts. (PERL,  ColdFusion)
* Web page development for benefit enrollment system (HTML, JavaScript, IE and Netscape)

Designed and programmed database scripting framework for print applications.

Environment: Windows NT 4.0, OpenVMS, MS SQLServer, MS and Sybase TransactSQL, DBLib, JavaScript, ColdFusion, HTML, Perl

# Professional Asociations

[IEEE, Computer Society](http://computer.org/)

# Education

September 2005 - Microsoft Professional Developers Conference

Feb 1978 - Jan 1980 [Rockford College](http://www.rockford.edu/)

B.S. Mathematics, Summa Cum Laude, 3.92/4.00 GPA.