

## **MICHAEL J. RYAN**

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### **SUMMARY**

I have over 20 years of experience with web based applications as a developer and creative problem solver. I have worked in a number of industries including Banking, Government, Military, Aerospace, Corporate Security and Electronic Commerce. I enjoy project and contract based development, though am more than open to a full time opportunity in a diverse working environment.

I am skilled in a broad range of technologies, and have worked throughout the entire chain of web based application development from rich Html5/Ajax front ends, backend communications and database development. I was the founder and organizer for the JavaScript-AZ User Group, as well as active participant in several other local technology based community organizations (ASP.Net, Node-AZ, Phoenix JS).

### **SKILLS**

The following is a list of skills and technologies I have worked with, and am familiar with.

Node.js (since 0.4), Express, Koa, Angular (1 and 2), React, Redux/Flux, MongoDB, Cassandra, Elasticsearch, Windows, Linux, BSD, Mac OS X, Microsoft SQL Server (MS-SQL, T-SQL, Versions 6-2008), Oracle, FirebirdSQL, PostgreSQL, MySQL, Stored Procedures, Triggers, Internet Information Server (IIS), NginX, Apache, Classic ASP (Jscript, VBScript), ASP.Net (VB.Net, C#, ASP.Net MVC, Mono, Winforms, Webforms, Server Controls, Web Controls, Comet, HTML, HTML5, CSS, CSS3, Ajax, Microsoft Ajax Toolkit, jQuery, jQueryUI, Prototype JS, Scriptaculous, ExtJS, JavaScript, JSON, DHTML, WCF, Web Services, Windows Services, Flash, Actionscript, C#, VisualBasic.Net, Visual Basic,

### **HIGHLIGHTS**

#### **Software Architect**

- Fault tollerant service architecture utilizing Node (iojs), Docker (Dokku-Alt) and Ansible to deliver services via ZeroMQ (0mq) and Web-Services for backing a next generation front end using Node, Koa, React + Flux.
- Sharable Content Object Reference Model (SCORM) and Airline Industry CBT Committee (AICC) Learning interfaces. Utilizing flash content, as well as creating a flash interface that interacted with a SCORM/AICC Object Model based Learning Management System (LMS).
- SCORM/AICC based Learning Management System.
- Kiosk interface to manage a municipal water station, with a replicated database using openSUSE, mono and FirebirdSQL.
- Content Management System (CMS) using ASP.Net (C#), with a Microsoft SQL Backend.

- Multi-user, multi-company web based portal for a major travel fulfillment company. Utilizing ASP.Net with custom web controls for the front end, interfacing with middle-tier objects written in C# which interface with a MySQL backend.

## Senior Developer

- Access Request Tool that consisted of three application interfaces, as well as a WCF service broker to catalog, manage, record and control access management provisioning for a major banking institution. The front ends consisted of one application utilizing ExtJS with a WCF backing service for the interactions. The other two UI applications were created with a combination of jQueryUI and MS Ajax Toolkit controls with ASMX backing services.
- Flash User Interface wrapper that used eSCORTE for ActionScript to interface with a SCORM LMS system. The desire was a self-contained interface for the learning content as a single course/lesson, which was used over the top of the LMS interface, launching full-screen. Created a custom course API model, as well as an event system in order to better control preloading.
- ASP.Net based CMS that utilized several custom web controls in order to provide a rich user interface.
- AICC course interface that used a VB6 application, as well as a VB6 based ActiveX (COM) object in Internet Explorer, to act as a launch interface for Macromedia Authorware content.

## WORK HISTORY

### American Express (Intraedge)

<b>Position</b>	Senior Developer
<b>Dates</b>	9/2015 through 3/2016
<b>Responsibilities</b>	UI/UX development and prototyping next generation development
<b>Major Projects</b>	<p><u>CPI3 – Comprehensive Partner Integration:</u> 3rd party apply form integration. Enhanced Angular 1.x application, refactored interfaces, and enhanced UI elements. Introduced Sass, and Bootstrap from source.</p> <p><u>CPI4 Proof of Concept:</u> Designed a React + Redux application mirroring streamlined functionality loosely based on original CPI3 workflow, but different supporting application, result was about 1/5 the payload.</p> <p><u>ARMS – Acquisition Rule Management System (ARMS):</u> Management interface for application configuration infrastructure. Angular 2, Bootstrap 4, Redux</p>
<b>Tools &amp; Skills</b>	<p>Node (0.12, 5.x) Express Babel Webpack Angular 1.x Angular 2 (ES6)</p>

React  
Redux  
Bootstrap (3 and 4)

## Inxsol

**Position** Senior Developer  
**Dates** 5/2015 through 8/2015  
**Responsibilities** Mentor other developers and refactor/polish applications for delivery.  
**Major Projects** First Responder Training Application:  
Refactored C# based MVC application, enhanced client-side asset usage, and polished user interface as needed.

**Tools & Skills** C# (Software Library Development)  
ASP.Net (C#)  
ASP.Net MVC 4 (C#, JSON, HTML5, CSS3)  
JavaScript (Node/iojs, Gulp, ES6, Browserify, BabelJS)

## Collector Car Network (ClassicCars.com)

**Position** Software Architect  
**Dates** 7/2014 through 5/2015  
**Responsibilities** Create next generation website.  
**Major Projects** ClassicCars.com:  
Worked on a next-generation cloud based infrastructure using a number of leading edge technologies. These include git, travis, ansible, docker and azure for CI/CD. As well as node.js (io.js), flummox/flux, react, logstash, azure storage queues and tables with microservices for the application stack, with elastic search, log stash and kibana (ELK) for logging.

The legacy applications include asp.net MVC and web forms, MS-SQL with interim pieces written in node with rabbitmq and mongo.

Other technologies evaluated include etcd, coreos, cassandra, postgresql.

**Tools & Skills** Node.js (node, npm, gulp, browserify, BabelJS)  
React/Flux (Flummox)  
C# (Software Library Development)  
ASP.Net (C#)  
ASP.Net MVC (C#, JSON, HTML5, CSS3)  
Azure Services (Azure Queues, Azure Blob Storage, Azure Tables)  
Microsoft SQL Server  
RabbitMQ  
MongoDB  
ElasticSearch, LogStash, Kibana

## GoDaddy

**Position** Software Developer III  
**Dates** 8/2013 through 7/2014  
**Responsibilities** Migration of WebsiteBuilder application  
**Major Projects** WebsiteBuilder:  
Worked on maintenance and enhancement of existing ASP.Net MVC application as well as migration of existing services and infrastructure to a new Node based framework.

**Tools & Skills** C# (Software Library Development)  
ASP.Net (C#)  
ASP.Net MVC (C#, JSON, HTML5, CSS3)  
Node.js (node, npm)  
Cassandra  
Microsoft SQL Server  
Express

## US Airways (VOLT)

**Position** Senior Developer  
**Dates** 5/2013 through 8/2013  
**Responsibilities** Enhanced API interfaces for internal operations.  
**Major Projects** Refactored C# based API interfaces using WCF creating a Unity Framework interface that allowed for more transparent service creation, as well as client usage.

**Tools & Skills** C# (Software Library Development)  
ASP.Net (C#)  
ASP.Net MVC 4 (C#, JSON, HTML5, CSS3)

## Collector Car Network

**Position** Senior Developer & Architect  
**Dates** 11/2011 through 5/2013  
**Responsibilities** Design and build internal and externally facing applications and mentor junior developers.  
**Major Projects** ClassicCars.com:  
Reducing load times by over 80% by improving resource packaging and using asynchronous enhancement for loading features. The primary site runs under ASP.Net, originally ASP.Net 2 with project updates to 4.5. Replaced the search back end utilizing an API service written in NodeJS and MongoDB, which also utilizes RabbitMQ. Improved search visibility, and improved the look and feel of the site. Created a client library for vehicle information report lookups, with 95% code coverage in Unit Tests (MS-Test). Created various infrastructure services utilizing NodeJS.

RoadReadyCertified.com:

Architected the system around ASP.Net MVC3/4 using Entity Framework, and other modern tools (Bootstrap, Less, jQuery) to create a performant site that is usable in mobile and desktop devices. The core of attention has since been on tablet to desktop devices.

PhotoGallery.ClassicCars.com:

Created an HTML5 application including client-side routing and support for ajax crawling (shebang urls). The backend utilizes ASP.Net MVC3 and Entity Framework.

Other:

Created a mail spool processing system that improved delivery rates, while also increasing visibility. Other changes include sending from the spool via SendGrid (which allowed for other enhancements and tracking).

**Tools & Skills**

Usability Design  
Project Architecture  
Lead/Mentor Developers  
C# (Software Library Development)  
Server-Side JavaScript (NodeJS, MongoDB)  
ASP.Net (C#)  
ASP.Net MVC 3-4 (C#, JSON, HTML5, CSS3)  
Twitter Bootstrap (CSS/Less, JavaScript)  
JavaScript (DHTML, AJAX, jQuery, jQuery Validation, JSON)

**inXsol**

**Position**

Director of Software Development

**Dates**

02/2011 through 11/2011

**Responsibilities**

Manage and direct development efforts on various projects within the organization.

**Major Projects**

Command Plan:

Worked on creating a web based version of the Command Plan incident command training software. The software utilizes a flash based client written in Flex (Flash Builder 4) with Actionscript. There are also authoring components created in Flex as well. The front end is using ASP.Net WebForms, with portions using an MVC 3 interface. Portions of the front end are written with HTML5 tags and CSS3 style decorations. The backend has several tiers including web based service interfaces, a communication router (message queue) using WCF in a Windows Service as well as the simulation engine itself using a WCF interface in a Windows Service. This allows for future scalability with different tiers being able to grow into multiple physical systems as the need arises. There is also a speech processing service which utilizes FLOSS Java components.

**Tools & Skills**

Project Management  
Lead/Mentor Developers  
C# (Software Library Development)  
VB .Net (Software Library Development)  
Windows Communications Foundation (WCF)

ASP.Net (C#, VB.Net)  
ASP.Net MVC 3 (JSON, HTML5, CSS3)  
JavaScript (DHTML, AJAX, jQuery, jQuery Validation, JSON)  
Flash Builder 4 (Flex 4, ActionScript 3)

## **COMSYS (Now Experis) for US Airways**

**Position** Senior UX Developer  
**Dates** 07/2010 through 02/2011  
**Responsibilities** Develop and enhance web based applications. Design, develop and enhance the public website, concentrating on web based check-in.  
**Major Projects** Web Check-In:  
Worked on creating a modern web front end for the web check-in portion of the website. Utilized HTML 5 based tagging, as well as enhanced features utilizing CSS3 (with CSS3PIE for ie6-8 Support). The server-side code utilized C# with ASP.Net MVC (version 2) along with custom integration utilizing jQuery, jQuery-Validation extensions, and jQuery Metadata extensions. Utilized modern techniques in CSS/JavaScript minify and merge. Created complex interactions utilizing events, custom UI controls, and implemented features for simplified communications via Ajax/JSON. The back-end communications utilized several service broker layers written in C#. Unit testing was done with VSUnit and Moq for the main mocking framework. The overall changes created a UI that was consistent with the existing site, but reduced the overall payload by well over half, and improved page load time by a factor of 10.  
Other:  
Reduced various scripted entries, unified the work done for date entries, and modified the time based results through the front-end and service layers to allow for an easier configuration of both beginning of day, and end of day for search criteria.

**Tools & Skills** Mentor other developers on modern web application development techniques.  
C# (Software Library Development)  
ASP.Net (C#)  
ASP.Net MVC 2 (JSON, HTML5, CSS3)  
JavaScript (DHTML, AJAX, jQuery, jQuery Validation, JSON)  
Microsoft Ajax Toolkit

## **Collector Car Network**

**Position** Senior Developer & Architect  
**Dates** 1/2011 through 5/2013  
**Responsibilities** Design and build internal and externally facing applications and mentor junior developers.  
**Major Projects** ClassicCars.com:  
Reducing load times by over 80% by improving resource packaging and using asynchronous enhancement for loading features. The primary site runs under ASP.Net, originally ASP.Net 2 with project updates to 4.5. Replaced the search back end utilizing an API service written in NodeJS and MongoDB, which also utilizes RabbitMQ. Improved search visibility, and

improved the look and feel of the site. Created a client library for vehicle information report lookups, with 95% code coverage in Unit Tests (MS-Test). Created various infrastructure services utilizing NodeJS.

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**Tools & Skills**

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Project Architecture  
Lead/Mentor Developers  
C# (Software Library Development)  
Server-Side JavaScript (NodeJS, MongoDB)  
Microsoft SQLServer  
ASP.Net (C#)  
ASP.Net MVC 3-4 (C#, JSON, HTML5, CSS3)  
Twitter Bootstrap (CSS/Less, JavaScript)  
JavaScript (DHTML, AJAX, jQuery, jQuery Validation, JSON)

**Inxsol**

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**Tools & Skills**

Project Management  
Lead/Mentor Developers

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**Tools & Skills** Mentor other developers on modern web application development techniques.  
C# (Software Library Development)  
ASP.Net (C#)  
ASP.Net MVC 2 (JSON, HTML5, CSS3)  
JavaScript (DHTML, AJAX, jQuery, jQuery Validation, JSON)  
Microsoft Ajax Toolkit

### **COMSYS for Wells Fargo Bank**

**Position** Senior Developer  
**Dates** 06/2009 through 06/2010  
**Responsibilities** Develop and enhance web based applications. Design, develop and enhance T-SQL stored procedures within MS-SQL 2005/2008 data stores.  
**Major Projects** ART Workflow WCF Service:  
Worked on an interactive WCF service endpoints for use with integrating the

main Access Request Tool (ART) applications and related applications.

ART Workflow UI:

Worked on an ExtJS based application backed by a WCF/Ajax service for the UI interactions. The ART Workflow UI is used by systems analysts in order to facilitate their work queues for managing access to various systems within the Wells Fargo infrastructure.

ART Approval:

ART Approval is a jQuery and jQueryUI based front end that facilitates the approval of given personnel and resources for said personnel in order to approve or deny the request for a given resource. It is backed by an ASMX JSON/Ajax service for the main approval task listings. The approval task listings are serviced by a stored procedure that supports both paging and filtering.

ART Request:

ART Request is a UI interface for requesting access for various personnel to various systems resources. There are many different request forms, and logic related to reports to information as well as a complex set of workloads that combine jQueryUI as well as the Microsoft Ajax Toolkit.

**Tools & Skills**

C# (Software Library Development)  
Microsoft SQL Server (v2005)  
WCF Web Services  
ASP.Net (C#)  
ASP.Net Web Services  
JavaScript (DHTML, AJAX, jQuery, jQueryUI)  
Microsoft Ajax Toolkit

**Solution Stream (Utah)**

**Position**

Senior Developer / Architect

**Dates**

03/2009 through 05/2009

**Responsibilities**

Design and develop web based applications. Mentor junior developers.

**Major Projects**

Web Based POS & ERM:

Worked on a custom web based POS/ERM system that utilized the latest technology in the Microsoft web development stack.

**Tools & Skills**

ASP.Net MVC (C#)  
Microsoft Unity Framework (IoC/DI)  
JavaScript (DHTML, AJAX, jQuery)  
HTML (modern browsers, IE7+, Firefox 3)  
C# (Software Library Development)  
Microsoft SQL Server (v2005)  
NHibernate + Fluent  
NUnit + Moq

**MDI for Apollo Group (University of Phoenix)**

**Position**

Senior Software Engineer

**Dates** 06/2008 through 01/2009

**Responsibilities** Enhance and modify existing applications to improve performance and scalability. Mentor junior developers.

**Major Projects** Apollo.Common Library:  
Created a library to support a common infrastructure for shared and diverse application configuration needs, as well as an enhanced memcached client, and had begun integration of a common logging system to utilize the common configuration portion.

Reporting Application:  
Refactored an existing reporting application bringing the processing time of specific reports from over five minutes, to less than 20 seconds.

User landing page (Portal):  
Refactored the new portal landing page for online users in order to reduce load time from eight seconds to under one second for the average user.

**Tools & Skills** ASP.Net (C#)  
JavaScript (DHTML, Remote Scripting, AJAX, Web Services)  
HTML (targeting general, and specific browsers)  
C# (Software Library Development)  
Microsoft SQL Server (v2000)  
Oracle (9-10)

### Self / Roughneck Development

**Position** Software Design and Development

**Dates** 12/1994 through 06/2008

**Responsibilities** Independent, and contract development projects, including, but not limited to software design and development, application programming, software development, web development, and graphic design. Built and supported various pc hardware and networks.

**Major Projects** Municipal water pumping station system:  
Kiosk interface using GTK# with moz-gtk-embed, connecting to a FirebirdSQL database, with a custom replication system.

Government Website, State Government Agency, Public Website:  
Redesigned and build a website for a state agency.

Private Web-Application, Local Awareness Group:  
Worked on an information, and communication website targeting local students, and offering interactions such as live chat, and image management in PHP with a MySQL database server for a Florida client.

Hobby Applications, Personal Development, Bulletin Board System:  
Running an active bulletin board with custom modifications for telnet use, along with implementing custom services to interact with a web interface utilizing JavaScript (the interface for BBS extensions) and an ASP.Net web interface with the use of MySQL for database use.

**Tools & Skills** Windows (95,NT4,98,98SE,2000,ME,XP,2003)

Linux (RedHat, Fedora, Suse, Debian)  
ASP.Net (C#, VB.Net, JScript .Net)  
Classic ASP (VBScript, JScript)  
PHP (v3,v4)  
Java/JSP (limited support)  
JavaScript (DHTML, Remote Scripting, AJAX, Web Services)  
HTML (targeting general, and specific browsers)  
Visual Basic (v5,v6; Applications, COM/DCOM)  
Visual Basic .Net (Applications, ASP.Net)  
C# (Windows Services, Applications, ASP.Net, Web Services)  
Microsoft SQL Server (v7,v2000; T-SQL, Queries, SPs, Triggers, Replication)  
MySQL Server(v4,v4.1,v5; Queries)  
Firebird SQL Server (v1.5,v2; PL/SQL, Queries, SPs, based on Interbase)

**Additional Details** I like to work on various small, and hobby projects that stretch my skills as well as offer the chance to learn, and work with new technology.

### **Data Fusion Technologies, Inc.**

**Position** Senior Software Developer  
**Dates** 01/2007 through 10/2007  
**Responsibilities** Develop, extend and maintain web based software applications for internal, and client use.  
**Major Projects** Web Application, Legal Industry:  
A reporting application that provides statistical and analytical information for the legal industry. This software contains multiple sub-applications with legacy portions written in Classic ASP in VBScript/JScript, and most newer portions written in ASP.Net 1.1 (Visual Studio 2003) in C#.  
**Tools & Skills** Windows (XP,2003)  
ASP.Net (C#)  
Classic ASP (VBScript, JScript)  
JavaScript (DHTML, Remote Scripting, AJAX, Web Services)  
HTML/DHTML  
C# (Windows Services, Applications, ASP.Net, Web Services)  
Microsoft SQL Server (v2000,v2005; T-SQL, Queries, SPs)  
**Additional Details** (none)

### **Inxsol, LLC**

**Position** Senior Developer & Architect  
**Dates** 06/2003 through 01/2005  
**Responsibilities** Design, develop and support multiple in-house and client applications, and web sites.  
**Major Projects** Military Project, Aerospace Industry, Training Software:  
Worked on the design for a SCORM compatible LMS interface utilizing Flash MX with ActionScript for content delivery, under an ASP.Net server, while extending SCORM in order to establish offline delivery.

Corporate Web-Application, Publishing Industry, Training Software:  
Worked on the extension of an AICC LMS system utilizing Authorware

content with a Classic ASP delivery system with a Visual Basic client, to utilize an inline VB6 ActiveX Control (OCX) within the browser)

Corporate Web-Application, Agriculture Industry, Content Management Software:

Designed and developed an interactive Content Management System (CMS) with a back-end in ASP.Net (VB.Net) with an MS-SQL database server, utilizing a browser driven component for content editing, with inline previewing. Also designed and developed a custom, and extensible system of additions/plugins (ASP.Net Web Controls) with a flexible administrative interface that is also extensible.

**Tools & Skills**

Windows (2000,2003)  
ASP.Net (C#, VB.Net) Classic ASP (VBScript, JScript)  
Java/JSP (limited support)  
JavaScript (DHTML, Remote Scripting, Web Services)  
HTML (targeting general, and specific browsers)  
Visual Basic (v6; Applications, COM/DCOM)  
Visual Basic .Net (ASP.Net)  
C# (ASP.Net)  
Microsoft SQL Server (v7,v2000; T-SQL, Queries, Stored Procedures)

**Additional Details**

Worked as contract consultant until 2004-01, and as a permanent employee from 2004-02 through 2004-08, currently serving as a contract consultant.