# **Matthew Martin**

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I am an accomplished senior developer and technical lead capable of delivering complex web development projects on time and on budget by effectively pair programming, collaborating, facilitating, leading and coaching developers in an Agile or Scrum framework.

I'm most interested into moving into a role as a Scrum Master, PM of a small team, or continuing as a technical lead/senior developer in an Agile/Scrum context. (Scrum Master/PM resume available on request.)

Please request technical resume for detailed discussion of each technology and project I've worked on.

I have an active DoD Secret clearance, renewed while at CACI. I'm open to work that doesn't require it.

I will work at metro accessible locations. I am unable to relocate, but I will consider remote work for the right opportunity.

Salary requirements, \$130,000/yr negotiable depending on the details of the offer.

**Technical Skills** 

Likes: asp.net, ms-sql, java, mysql, php, ruby, javascript, jquery, nunit, ado.net, task-parallel-library, iis, .net-4.0,

.net-4.5, visual-studio-2010, visual-studio-2012, visual-studio, python, knockout.js, angularjs, asp.net-

web-api, asp.net-mvc, typescript, requirejs, visual-studio-2015

Dislikes: vb6, datajunction, sharepoint, ajaxcontroltoolkit

Senior Software Engineer I – Forsmarsh Group asp.net, asp.net-web-api, wif, python, asp.net-mvc-4, wcf

**Python I** did maintenance development releases of a Python 3 GUI application. The application was for a research study of how people create passwords. The first release needed a few known bugs fixed and demonstrate that no additional bugs were introduced. To achieve this, the legacy application was refactored and put under a large number of automated unit tests.

Once the legacy application was stabilized, I created a new internal library over the TKInter library to simplify creating new screens. The application was instrumented for diagnostics and trace so that issues could be identified by examining logs.

The final application included a build script, machine generated API documentation and a packaged application that could run on a machine without a pre-existing Python runtime.

Tools used PyCharm, Eclipse, Iron Python

Libraries used unittest, nose, sphinx, pywin, virtualenv

**.NET Stack Backend Development** Created entity framework data tier for authentication store. Augment existing WIF (Windows Identity Framework) single sign on solution to support self configuration. Create HTTP/REST based ASP.NET WebAPI interface and corresponding C#, JavaScript and PHP clients.

Participated in maintenance of both WebForms, MS-Ajax and MVC 4 applications.

Created WCF service layer, including features for reducing configuration and misconfiguration risks. Also did WCF performance tuning, which included improving serialization and switching to asynchronous techniques using .NET 4.0 Task library.

Create data import tool using ASP.NET, jQuery and jQuery-UI to deliver a solution faster and with more quality assurance checks than could have been implemented in WebForms.

**HTML5** and **TypeScript Front End Development** Implemented requirejs module loading, converted existing JavaScript to TypeScript. Implemented clientside error logging, client side random data generation for testing and underscore based widget templates. Participated in creating knockout-js client side databinding for an MVC application.

Created workflow for the periodic import of a complex Drupal-based HTML template from an external organization in a way that the same artifacts could be used to style several ASP.NET webforms applications as well as an MVC application.

**DevOps and Buildmastering** I established an end-to-end automated TFS build, customized for nUnit tests. Wrote powershell scripts to automate certain build tasks and deployment tasks.

#### Senior .NET Developer – Benten Technologies

asp.net-web-api, asp.net-mvc, c#-4.0, tfs, entity-framework, wif

July 2014 – December 2014

Benten was the hiring agency that employed me to work at ForsMarsh until my contract converted to full time employment at ForsMarsh. The contract and location of employment stayed the same throughout.

# JavaScript and C# Software Developer III - CACI

javascript, tfs, asp.net, c#, .net-4.0, jquery, wcf, jquery-ui, task-parallel-library

February 2013 - July 2014

**OracleForms to .NET Application Conversion**. Worked on a large team of three to six developers in an application re-write. We migrated the user interface from Oracle Forms to a hybrid ASP.NET WebForms, MVC and JavaScript driven single page application, with some work to integrate with Oracle backend using PL-SQL. Significant time spent improving web application performance to get the web application which started out with 10-15 second response for most action down to instant response time.

.NET Performance Tuning . I also did extensive performance for an application that generated Word documents, which at the beginning could run overnight and often failed anyhow. I solved the application's multi-threading problems, races, deadlocks, implemented Parallel Task Library and WCF patterns to get the reports to generate in three to five minutes, despite having to do 50 times the work load.

**DevOps and Buildmastering**. Refactored legacy code and implemented automated unit and integration tests to detect breaks before release to test. Participated in the release process using TFS as a process management tool and build server. Saw about six maintenance releases to production and 50 iterative releases to test as a part of a broader continuous integration strategy.

#### JavaScript and C# Software Developer III - AboutWeb

asp.net, c#, javascript, tfs, iis7

August 2012 - February 2013

AboutWeb was the hiring agency that employed me to work at CACI until my contract converted to full time employment at CACI. The contract and location of employment stayed the same throughout.

c#, visual-studio, vs2010, vs2008, subversion, team-city, flyspray, ssrs, telerik

**Full Stack .NET Development I** did maintenance development on a line of business application using C#, TSQL, Javascript, using Telerik components. I upgraded it from .NET 1.1 to 3.5. I created a comprehensive set of automated integration and automated unit tests (nUnit) that reduced the number of logged errors from hundreds a day to several per week.

I was lead developer on a three person team that moved about 15 releases through TSA's SDLC release process. Task included identifying opportunities for improving the application, architecting the application to allow for collaboration, dividing certain development tasks and code review of other developer's code. I wrote SDLC documents to support release activities. I also did the maintenance development necessary to get the application to pass C&A (Certification and Authorization).

**DevOps**. I set up a complete continuous integration system, initially using Visual Source Safe (VSS), Luntbuild, and Flyspray issue tracking and eventually upgrading to Subversion, Collabnet issue tracking and TeamCity. I was responsible for managing the servers and workstations on the developer network, including installing operating systems, DBA tasks for MySQL and MS-SQL, such as version upgrades, schema comparison and security hardening.

.NET Appplication Modernization . I refactored a .NET/C#/LLBGen travel scheduler application to enable the use of a majority of the existing codebase for use by a new department. LLBGen is a ORM, similar to NHibernate. I did another modernization upgrade to take an ASP.NET scheduling and travel application to 2.0 and identified the legacy application's XSS and SQL Injection vulnerabilities.

**Data Warehouse** I extracted data from a schema lacking foreign keys to a star schema so that it could be loaded into a variety of SQL Server Analysis Services cubes.

SharePoint. I created a proof of concept web part for a Sharepoint management statistics dashboard.

**Software Developer III** – Dynamics Research Corporation asp-classic, asp.net, sql-2000, ssas, ssis, ssms, vs2008

May 2005 - May 2008

**ASP Classic to ASP.NET Migration**. While working on MERLIN, an ASP classic application, completed both an upgrade to ASP.NET and a rewrite using ASP.NET, taking full advantage of all features of ASP.NET 2.0, including custom and user controls. Created innovative 508 accessibility interface to existing MERLIN using ASP.NET 2.0 profile features

**ASP.NET and T-SQL Website**. I wrote a web based data interface tool for providing an interface between an Oracle scheduling and the MS SQL server database that feeds a simulation model. Interface application includes a significant number of tools and reports for dealing with common data interface scenarios and exceptions.

**ASP Classic Modernization**. Upgraded ASP classic application to use CSS and web standards, dramatically reducing size and complexity of HTML files and increasing the ease of maintenance development. All improvement done using CMMI repeatable processes

**DTS Support and Migration to SSIS**. While working on the MERLIN contract, I provide ongoing support for troubleshooting data interface issues that arise in the monthly update of the MERLIN data warehouse. I have upgraded all data import packages from DTS to SSIS, the successor technology to DTS.

**T-SQL Maintenance**. I wrote T-SQL to implement new metrics and levels of detail into MERLIN. I refactored T-SQL queries to reduce lines of code by factor of five for Weapon System Availability task.

**Microsoft SQL Administration**. I automated backup and other administrative scripts for database. Implemented notification and monitoring to ensure health of the data warehouse.

**SharePoint Based Issue Tracker**. Installed and configured SharePoint issue tracking system for support of software development, which was used in live production to support a geographically distributed software development team. Successfully used new issue trackers for coordinating internal communications in a three person distributed team.

**SQL Server Analysis Service Project**. I wrote prototype Microsoft Analysis Services cubes for enabling high performance business intelligence querying. Created proof of concept for use of MDX for data warehouse querying.

**Source Control Migration**. I collaborated with administrative staff to repair and stabilize VSS repositories and prevent loss of historical source code. Set up Subversion repository for development team to migrate their source code to.

Created developer oriented documentation. I wrote data dictionary and API documentation in support of maintenance tasks for MERLIN. I wrote comprehensive web-based user documentation for "MOS Refresh" data interface tool.

#### Systems Developer I - Prince William County

vb6, ms-access, sql-server, database

October 1998 – May 2005

**VB6 WinForms Development, T-SQL Development and MS-Access Reports**. I did maintenance on a closed source client-server application for the tax office. Tasks included report writing for mailing tens of thousands of heterogeneous tax bills. I wrote code to interoperate with existing application via the SQL Server through triggers, scheduled tasks, and stored procedures.

I also wrote a large integrated tax billing software application to supplement the county's COTS system using MS Access, XML, MS SQL Server and custom unit tests. This project involved all stages of the software development cycle from soliciting requirements to design, to deployment and training.

**DTS and Custom Interfaces**. I wrote numerous TSQL procedures, DTS, Ms-Access and other custom import and export packages to support interfaces with external organizations, such as banks and other government agencies.

Data Quality . I wrote a variety of MS-Access cross tabs to find data quality errors in a Visual FoxPro system.

#### **Education**

#### **M.A. Economics** – University of Akron

1996 - 1998

wolfram-mathematica

Also worked as teacher's assistant.

**BSBA Finance** – University of Akron excel

1996

## **Projects & Interests**

#### Stack Overflow - http://stackoverflow.com/users/33264

November 2008 - Current

Written 460 answers. Active in c#, asp.net, database, sql, .net and 4 other tags.

**GitHub - tokipona.parser** – <a href="https://github.com/matthewdeanmartin/tokipona.parser">https://github.com/matthewdeanmartin/tokipona.parser</a> October 2014 - January 2015 c#, asp.net-mvc, regex

A Toki Pona Parser

Sole developer for a recreational linguistics project. Application can be thought of as a sentence diagramming tool for an limited artificial language.

Various mini-linguistics tools targeting toki pona, a very small fake language. Of potential interest to hobby linguists and conlang enthusiasts.

## CodePlex - Dataglot - A helper library for System.Data.Common -

September 2012 - March 2014

https://dataglot.codeplex.com/

ado.net, system.data.common

To support more than one database using System.Data.Common you need connection string conversion, light sql reparsing, multi-cast, trace and many more utilities

Also sole contributor. A mini data library that attempts to add multi-database broadcast, database discovery and other features to ADO.NET. Used in my open source hit counter.

# CodePlex - Irish Settings - An API to store settings in a database -

August 2012 - March 2014

https://irishsettings.codeplex.com/

application-settings, appsettings

This stores settings in an OleDb/Sql database using an API similar to ApplicationSettingsBase. Settings vary by app, version, user.

Also sole contributor. Mini-library that is a part of my open source hit counter.

## $\textbf{GitHub-Hicmah} - \underline{\text{https://github.com/matthewdeanmartin/Hicmah}}$

September 2014

jquery, sql-server

Hicmah - Hit Counter Module and Handler

A nuget installable web hit counter with self hosting and intranet apps in mind. Includes data collector and a data analytics dashboard. I'm am the sole contributor to this spare time project, which so far includes a micro-data access library, a settings library and a maintenance oriented hit counter.

No longer maintained.

Wordo Word Generator – <a href="http://wordgenerator.wakayos.com/Default.aspx?">http://wordgenerator.wakayos.com/Default.aspx?</a>

wordo=DerivationalMorpohology.wordo

asp.net

I took an open source application that was only available in web forms format and added an ASP.NET and HTML5 front end to it.

Migration from win-forms to web-forms. This was a recreational project.

## Writing

#### Using unit testing principles to write better integration tests - http://suburbandestiny.com/Tech/?p=601

Good unit testing dictates that tests not succeed or fail on account of actions in the database. But after excluding the code in the database, a significant part of the application has no coverage. Integration tests that include the database can be written using unit tests principles, including performance, repeatability and isolation.

#### Opinionated Trace - http://suburbandestiny.com/Tech/?p=640

Reverse engineering existing applications, detecting unexpected behavior that doesn't throw exceptions or interacting with a part of an application that is poorly surfaced on the UI can call for using trace and logging frameworks, however, these rarely come with advice about what would be effective trace, instead these frameworks tend to encourage "do what ever you want" thinking and results in trace that doesn't say much interesting or valuable.

C# Basics- Classes and basic behavior | Mister SQL - http://tech.wakayos.com/?p=766

Posted on October 1, 2014 by matt

**Tools** 

First Computer: Atari 400

Favorite Editor: Visual Studio 2015 with Resharper, PyCharm, Intellij and Eclipse

# **Background**

I'm a father of an engineer in college and a toddler and baby girl who will grow up knowing how to write code, too.

I have organized the following meetups: Arlington Linguistics Book Club, ran for 34 books. Arlington Icelandic Study Group, ran for several years. Arlington Software Development Book Club, ran for about a year. DC Software Management Book Club, ran for about a year.

I've served on the The Village of Gum Springs HOA and am currently the President of The Takoma Home Owner's Association