

Trevor Ratliff

Summary

- 16 years programming for web applications, desktop systems and mobile devices
- 14 years of SQL database design
- 13 years of system analysis and design
- Multimedia specialist: photography, digital image manipulation, 3D modeling and animation, videographer, tutorial and presentation work

Professional experience

Sept 2015 – Present Veterinary Data Services, Inc. Lexington, KY
Title: Developer II

- My duties include upgrading and maintenance for the company's big data systems, and adding features to and fixing bugs for several custom software products. I used a variety of different programming languages and frameworks to fulfill my duties, such as C#, MVC .Net, React.js, Angular.js, JavaScript, TypeScript and Java. I also work with Microsoft Azure services, such as virtual machines, web jobs and cloud storage. An example of some work I'm doing is replacing the OrientDB graph database backend for an ArangoDB graph database. A graph database is being used to find new and useful relationships in our big data repository. I've also worked on the software that collects the information that we store in our big data system. The software collects the data from the back-ends of various systems that our clients use and homogenizes it into a format that is consumable from our API. We then provide value adding services on that data. One service I worked on was a real-time Inventory Management system that allowed a parent corporation to set prices on goods and services in its child organizations regardless of the systems the child organization used.

March 2011 – Sept 2015 University of Kentucky Lexington, KY
Title: Programmer Systems

- My duties include system design and implementation, designing and maintaining databases, and maintenance of the custom software products that were built in-house. My work was in the .Net languages – mostly C#, MS SQL, and a variety of web application languages. I was also tasked with analyzing and suggesting better internal processes using my Capability Maturity Model Integration (CMMi) background. I set up a system for tracking and managing our software projects as well as processes for better using their code repository. While I was in this position I analyzed a need for a system that would consolidate how shift workers ran and logged their DVR checklist work. I designed and coded the system so it would present the user with an interface quickly while it finished loading the data via AJAX calls to an ASP.Net MVC backend that would often return or accept JSON data. A log of their actions and the results of their checklists were stored in a database I designed and implemented. I randomized the order of the DVRs the shift workers went through so they wouldn't be able to memorize as easily the total number of cameras to help ensure they were performing their tasks properly. I added some simple gamification principles to encourage the employees to complete their checklists. I also designed and coded a system for inventory and maintenance tracking on the bikes in the college's bike library. This project started out as a request from the customer. I took the information they gave us and developed the system requirements. After analyzing the requirements, I worked with the database

developer on an API for the database back end. I then coded the web front end in ASP.Net that incorporated a bar code scanner and a digital signature pad. After maintaining this project for 2 years we handed the code off to another group. I packaged up the code and the relevant code history to give to the other group. I also programmed a handheld device (Windows CE) for a package tracking system so their supply store could track their deliveries. I had to learn how to set up from scratch the handheld devices and how to set them up to restore themselves if they crashed or went through a reset. I also had to figure out how to automatically sync the handheld with the database backend when the device was placed on a charging cradle.

April 2000 - Feb 2011 New Directions Technologies Inc. Ridgecrest, CA

Title: Computer System Analyst

- My duties included designing and implementing whole software systems, database design and maintenance, and maintenance for our customer's custom software products. I commonly needed to work in C++, C#, .Net languages, various database servers, and a variety of web application languages. Multimedia production and support (such as demo CDs, training media and documentation, web site design and maintenance) were also among my responsibilities. The first 6 years I worked internal research and development, with the last years working on contracts. While in this position I designed, and developed, from scratch, an electronic business suite which included time cards, management of projects, travel, leave, purchases, employees and reimbursements, and a forum. This system then exported data for import into a 3rd party payroll processor. Watching processes that took 2 days and seeing that time be reduced to 2 hours after I put a new system in place gave me great satisfaction. I also worked on an automated data entry system that pulled time card data from the business suite and pushed it into a legacy green screen system. This task had been done by hand and took a whole afternoon, and after I put in place the export/data entry system it took 2 – 3 minutes. More recently I have written a web system to disperse username and passwords in a secure manner that also allowed the network admins to see who had retrieved their new password and who still needed to access that data. This system used a PKI (Public-Key Infrastructure) to validate and authenticate users prior to divulging a temporary password. PKI is one of the most secure methods of user verification today. I have also worked on an emulation system for a GPS assisted inertial measurement unit (IMU).

July 1999 - Dec 1999 Fedcom Ridgecrest, CA

Title: Shipping and Receiving

My duties included receiving new stock and placing it on the shelves, shipping RMAs to the manufacturers or vendors, taking care of customers (i.e. Checking them out or helping them with questions) and general clean-up of the store. I also learned how to build computers from parts while working there.

July 1997 – July 1999 Church of Jesus Christ of Latter-Day Saints (Volunteer)

Title: Missionary

I served in the Philippines, taught in Tagalog (one of the native languages). I learned many important skills while there, such as communication and management of people and time. I learned the importance of listening to others. I came to understand how to work with what others knew to build up their understanding and knowledge. After an initial 2-month training in the language we were left on our own for the two years of service with weekly and monthly reporting.

**Summary of
qualifications**

HARDWARE/SOFTWARE SKILLS

IBM PC compatibles, Unix/Linux (built from parts).

AJAX, ArangoDB, ASP, ASP.Net, ASP.Net MVC and WebAPI, BASIC, C++, C#, CSS, FORTRAN 77, Git, HTML (versions 4, 5, DHTML, XHTML), JavaScript, JSON, OrientDB, Perl,

PHP, Python, Ruby, SQL (standard, Microsoft, MySQL, Oracle), Subversion, VBScript, Visual Basic, Visual Basic .Net, XML.

Atom Editor, Edit Plus, IntelliJ IDEA, Microsoft Visual Studio (versions 6, 2000, 2003, 2005, 2008, 2010, 2012, 2015), SciTE, gVim (software development programs).

Blender, LightWave, Marai, Softimage, XSI (3-D modeling and animation programs).

Adobe Photoshop, Corel Photo Paint, Gimp, Painter Classic (graphics programs).

After Effects, Flash, Premier, QuickTime, Real Media, Viewlet Builder (multimedia production programs).

Microsoft Access, Microsoft Visio, Microsoft Project, Microsoft Word, WordPerfect, Microsoft Excel, and Microsoft PowerPoint, OpenOffice Suite (office productivity programs).

DOS, Linux/Unix, Mac, Windows 3.1, Windows 95, Windows 98, Windows CE, Windows 2000, Windows XP, Windows 7 operating systems.

XML, DTD/Schema Design, XML DOM, XSLT, New Horizons Computer Learning Centers, - 40 Hours

Asp.Net 2.0 training from Microsoft - 28 hours

Introduction to CMMi v1.2 - 24 hours

<u>Education</u>	Name of School	Degree	Date Achieved	Major
	American Intercontinental University On-line	Bachelors of Information Technologies	5/06	Programming focus
	Cerro Coso Community College	Certificate (the Associates degree was still in the works when I completed this program)	5/00	Computer Animation

<u>Achievements</u>	Description	Date Awarded
	Crystal Spire awarded for outstanding support of another team's project	5/05
	Clock awarded for Most Valuable Employee	5/02