# **Trevor W. Ratliff**

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I've been a professional programmer since 2000 with 3D animation, photography, and film background ... but that doesn't really say much. I'm a creative person, so much so that I have a hard time purchasing things because I either know how to make it already or I can figure it out pretty quick. Some of my recent projects have been a camera shoulder sling, moccasins for my baby and a kilt that I wear regularly - bifurcated clothing just wasn't meant for men; -) ... but that doesn't tell anyone about my programming abilities, though those skills help greatly with programming tasks.

My love of programming can be traced back to when I was 5 years old and learning how origami transformed a flat piece of paper into amazing things. Things like frogs that could jump or human figures with 5 fingers on each hand that I would design later in life. So much versatility in one simple form. Origami lead to sewing toys, both lead to an active imagination which lead to videography in high school - where I could let others see what I imagined. I used my creative skills in providing effects for the video's I helped make - things like hanging actors so they appeared to have been hung by a noose. I also spent a lot of time behind the camera as the main camera-man which lead to photography and 3D animation. During my pursuit of special effects for the videos I was making I learned about programming, and I fell in love.

I loved the creative freedom programming gave me, there was a magic to it just like the magic that transformed a plain piece of paper into a fantastic creature. But there was more - I could do more, create more, entertain more, help more with programming than any of my other crafts or skills. The more society has move into the computer age the more I could do with programming. I could touch lives in new ways from productivity boosts at work to entertainment in the evenings with games for them and their children. While taking a required Quick Basic course in collage after finishing the current lesson I was writing AI for TIE Fighters and Proton Torpedoes for an X-wing flight simulator with graphics that were rendered pregame.

I have many, many ideas and a great many experiences; now I'm looking for a group of people with which to share those talents.

Maybe it's you ...

## **Technical Skills**

Likes:

c# javascript ruby blender gimp html html5 css angularjs reactjs model-view-controller asp.net-web-api vue.js arangodb graph-databases sql java mobile c++ android git github gitlab go haskell

# Experience

## Solution Architect - Avenu Insights & Analytics

Nov 2018 → Current

angular, angularjs, c#, asp.net-mvc, asp.net-web-api, asp.net-core-webapi, ef-code-first, ef-core-2.2, git, tfs, sql-server, rabbitmq, umbraco

The business unit I was in at Conduent was sold off to Avenu Insights & Analytics. My responsibilities have continued as they were as the technical lead for the Court Case Management product. In addition I've been selected to start up a new project to supplement and eventually replace several products that Avenu owns. During the project ramp-up I was responsible for creating and setting up the solution environment and helping make decisions on technical stacks. I was responsible for creating an extensible API framework as a central component for the solution. I also helped with integrating a CMS to the API for module extensions, and creating installers and a Continuous Integration setup for deploying and testing the solution.

### Solution Architect - Conduent

Aug 2017 → Current

angularjs, c#, asp.net-web-api, sql-server, ef-code-first, rabbitmq, entity-framework-6, docker, reporting-services, tfs

I was promoted to the solution architect for the project I was working on in my last position. I have the added responsibilities of making technical direction choices, and being the chief technical contact for the State Government client involved in the project. I run several meetings to gather status for the overall solution. I also am responsible for resolving any hindrances that may come up for the teams. I interact with upper management, quality assurance, developers, business analysts, product owners and clients to keep the solution moving forward. The people working on this product are spread across the world.

# Lead Programmer - Conduent

Feb 2017 → Aug 2017

angularjs, c#, asp.net-web-api, sql-server, entity-framework-6, rabbitmq, docker, reporting-services

I am the lead of a contracted team that was hired to finish an application that needed 2 years to develop. We were given 6 months and it was only about 10% complete. I am tasked with keeping the team running and removing any obstacles and helping them resolve their coding challenges. I was also tasked with document tracking module, and a stubbed micro-service to complete that would consume a RabbitMQ queue. The micro-service rendered SSRS reports that were then emailed and/or printed to a network printer without user input.

#### Developer II - Veterinary Data Services, Inc.

Sep 2015 → Feb 2017

reactis, flux, angularis, graph-databases, orientdb, arangodb, c#, css, asp.net-mvc, asp.net-web-api, windows-azure-storage, azure, relational-database, backend, dcos, docker

Creating new front-end interfaces and back-end logic for a ReactJS site. Converting the back-end from one graph database to another and adding new features to an AngularJS site. Document and train co-workers on use of ArangoDB, and DC/OS. Research new technologies for converting older systems to update their stability/features. Maintaining a broad base of data extraction libraries and tools, that pull data from a variety of client's data management systems.

#### Programmer Systems - University of Kentucky

*Mar* 2011 → *Sep* 2015

c#, .net, asp.net-mvc, javascript, html5, vb.net, sql, sql-server, css, jquery, blender, 3d, gimp

My duties include system design, database design and maintenance, and maintenance for our customer's custom software products. My work was in the .Net languages, 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. I designed and coded a system for inventory and maintenance tracking on the bikes in the college's bike library. I also programmed a handheld device for a package tracking system so their supply store could track their deliveries.

Senior Computer System Analyst – New Directions Technologies, Inc. (NDTI)

Apr 2000 → Mar 2011

c#, .net, asp, html, javascript, mysql, sql, sql-server, c++, linux, windows, php, gimp, blender, flash, xml, 3d

My duties included system design, 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. While in this position I designed and developed an electronic business suite which included timecards, 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. 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. More recently I have written a web system to disperse username and passwords. 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).

## Education

**Bachelor of Information Technology** – American Intercontinental University networking, application-lifecycle, testing, html, javascript, .net, asp.net, teamwork

2005 → 2006

I graduated Suma Kum Laude with a 4.0 GPA. I volunteered to be the lead in all but one group projects. In that role I broke the project down to workable pieces and assigned the parts to the other members of the group. When there was a gap in the work done or shortcomings in the work provided I rebalanced the workload of the group. I ensured the projects were completed, and completed well. When I was the lead we received A's on all the group projects.

# Certifications

## **Certificate of Comupter Animation**

1999 → 2000

photoshop, after-effects, adobe-premiere, lightwave, softimage, marai-xsi

## **Projects & Interests**

**TiddlyWiki5** – https://github.com/trevor-ratliff/TiddlyWiki5 javascript, python, svg

Mar 2014 → Current

A reboot of TiddlyWiki for the next 25 years

I've used TiddlyWiki for a number of years and prior to this major update there was a blog feature that I used heavily. After upgrading to this version and trying to do without the blogging feature, I decided to write one myself that integrated seamlessly into the system.

**HtmlTools** – https://github.com/trevor-ratliff/HtmlTools html, javascript, session-storage, css

Aug 2013 → Current

Various HTML tools I've created to simplify my life.

I'm the lead developer and main author of these tools.

The tools include:

- auto generated breadcrumbs using session storage
- a color explorer to help find tints, tones and shades of a color and colors that would fit in a color scheme (I have many more features I'd like to implement)
- some layout test using css
- a linked list test with a random music generator
- · and a simple data obfuscating library

**MultiMazeGen** – https://github.com/trevor-ratliff/MultiMazeGen javascript

Jul 2013 → Current

Maze generation tool using multiple maze algorithms in javascript

I wanted a maze generating library for JavaScript and after looking around a bit I wasn't able to find one that meet my needs. So I did research on the various algorithms so I could write my own. So far I've only been able to implement one algorithm, but the framework is in place to add more.

Tools First Computer: TI Pegusus Favorite Editor: Vim, atom, SciTE