# Josh McCullough

software engineer | leader | architect | mentor | ui/ux designer

# **Overview**

# Objective

To apply and grow my existing skill-set in a challenging, fast-paced, and rewarding software engineering environment.

To bring a new level of efficiency and stability to software projects by utilizing the latest technologies and software engineering ideals.

# Summary

# I Love Technology (and Learning)

Almost everything I do has something to do with technology and learning. Not only do I write software *every day*, but I always have one or more side projects in progress. In my free time, my goal isn't always to "ship" a product or to reach a defined goal — often I simply want to *learn something*. Whether I'm working on a JavaScript framework, catching a glimpse of Jupiter through my telescope, installing a PC in my car, donating my tech skills for a cause in which I believe, building an HTML5 game engine, configuring a Linux mail server, designing and budgeting my next house project, or printing something in 3D — view my profile on Thingiverse (http://www.thingiverse.com/QuantumConcepts) — it all comes back to technology and my unquenchable thirst for knowledge.

I live and breathe this stuff.

### What Drives Me

I'm driven by being challenged. I enjoy facing, dissecting, and solving problems. I also like to help people solve their own problems — view my profile on Stack Overflow (http://stackoverflow.com/users/374198/josh-m?tab=answers) for examples. I am motivated by knowing that *someone* is going to use and enjoy what I am working on. I strive to create concise solutions to the programming problems I face. I believe code is almost an art. A lot of people can write something which *works*, but not everyone can do that *correctly*. I pride myself on writing clean, concise, reusable and scalable code.

# **Projects**

Please find below a small collection of my work. I've highlighted my involvement on each project.

### Clara Knowledge Management (http://teslagov.com)

Helping inform important descisions across the globe.

Built using Java, Spring Boot, React/Redux, and TypeScript. A large set of microservices come together to provide a knowledge management platform which is used to share highly important information across the world.

Tech. Used: Microservices Java Hibernate React Redux My SQL TypeScript

# ARMATURE Fabric (http://armaturecorp.com)

Accreditation, certification, and quality management software.

Built using cutting-edge Javascript frameworks and tools, Fabric utilizes a complex set of microservices, CouchDB to store aggregated data, and Elasticsearch to provide instant search results across the entire platform.

Tech. Used: Microservices C# Web API 2 MS SQL CouchDB Elasticsearch Aurelia

# Federal Event Management Portal (http://fed-events.com)

Custom-built event management system.

This event management portal allows for the quick and easy setup of completely customizable Federal event-related websites. Includes complete CMS functionality, event registration, and more.

Tech. Used: C# MVC MS SQL HTML/5 CSS TypeScript UI/UX

# Health Indicators Warehouse (HIW)

Data Warehouse of health-related indicators - CDC/NCHS.

The HIW contains data from 125+ sources across 1,200+ health indicators. This project is part of the Data.gov (http://www.data.gov)'s Open Data Initiative (http://www.whitehouse.gov/open) and exposes massive amounts of publicly-consumable health-related data.

Tech. Used: C# MS SQL HTML/5 CSS JS UI/UX

### HIW Developers & Services

Over 1,000 RESTful (and SOAP) service methods.

Exposes data from the HIW. Custom CodeGenerator templates were used to generate the service methods and documentation. The system includes a real-time URL builder/service tester and API key registration/verification.

Tech. Used: C# MS SQL HTML/5 CSS Bootstrap JS Knockout UI/UX

#### CodeGenerator (http://quantumconceptscorp.com/Products/CodeGenerator.aspx)

Develop stable, robust and highly versatile software, faster!

This tool allows you and your team to get the nuts and bolts of any project up and running amazingly fast. The backbone of CodeGenerator relies on XML and XSLT. You design an XSL Template once and CodeGenerator handles the rest.

Tech. Used: C# WinForms MS SQL My SQL UI/UX

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Platform Liberty

Empowering candidates in the fight for liberty.

The goal of this project is to provide an inexpensive, easy-to-use web application for liberty candidates. This platform will be available to any candidate who is on the side of liberty - regardless of party their party affiliation. 10+ instances.

Tech. Used: Rails My SQL HTML/5 CSS Bootstrap JS Knockout UI/UX

#### Carson for Congress

Built atop Platform Liberty and customized to fit the needs of Jeffrey Carson's 2014 Congressional campaign.

Tech. Used: Rails My SQL HTML/5 CSS Bootstrap JS Knockout UI/UX

#### AeroBazaar (http://aerobazaar.com)

The most beautiful place to buy and sell aircraft online.

A robust aircraft listing engine allows potential aircraft buyers to easily find what they're looking for. Sellers can manage their inventory and add detailed information for each of their aircraft.

Tech. Used: PHP My SQL HTML/5 CSS Bootstrap JS Knockout UI/UX

#### 7Flix (http://quantumconceptscorp.com/Products/7Flix.aspx)

A full-featured Netflix client for Windows Phones.

Although this app is no longer available, since Netflix ditched their public API, it was the most complete Netflix client on the platform at the time. It included queue management features and the ability to search and browse the entire Netflix library.

Tech. Used: C# Silverlight UI/UX

## SuperTrition

Online nutritional supplement and fitness store.

A custom e-commerce backend including a full-featured shopping cart with Paypal, Google Checkout, VeriSign Payment Services (now Paypal), UPS and USPS integration. Custom order processor to monitor fulfillment and shipment status.

Tech. Used: C# MS SQL HTML/5 CSS JS UI/UX

For a more *interesting* experience, please visit http://JoshMcCullough.me.

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