# **Summary**

A senior software engineer with over 9 years of experience in crafting quality software. Able to guide a software team with sound communication and design a vision of where we should go for customer success. Consistently learning new technologies to bring back to the team to see if it is the best fit for the business solutions at hand. Work hand in hand with the users and developers on the team to collect the best requirements by constantly showing new features or making sure we are working on the most important features in an Agile way.

# **Skills**

C#

F#

ASP.net Web API

Microsoft Unity

Moq / MSTest

Javascript

Angular.js

SQL Server

TFS and Git

Visual Studio

Mulesoft API Gateway

Linux (CentOS)

NodeJS

ExpressJS

Azure Websites

Azure Table Storage

Message Queues

Task Parallel Library

# **Experience**

## **Quicken Loans – Senior Software Engineer** 01/12 to Present

API Gateway Team – An API gateway is enterprise software to aggregate and secure all the API’s within Quicken Loans. The solution helps take care of cross-cutting concerns, like security, metrics and documentation. An integral part in allowing our business to integrate our cloud software with our on premise software. The system is java-based and used a RESTful modeling language called RAML. It runs on CentOS servers deployed in AWS and on premise.

* Raised developer awareness of building RESTful services by:
* Modeling them in a language called RAML
* Workshops and mentoring sessions
* Developing presentation materials
* Using a wiki solution (confluence) to document all aspects of our API’s.
* Improved developer efficiency when generating REST clients by:
* Building clients based off RAML specification.
* Creating tools around managing client Id and Secrets for their API’s to allow searching and migrate from environments easier.
* Created a tool to automatically generate their API RAML using RAMLsharp (project below)
* Automated continuous integration by building deployment script to integrate into the build system (electric cloud) for deployingAPI proxies to the API Gateway.
* Ensured the most uptime by monitoring the servers of the API gateway with
* nmon
* logs
* AppDynamics
* AWS alerts
* Identified performance bottle necks from TLS 1.2, VPN tunneling, clustering, JVM using JMeter to make sure the architecture was the most performant possible.
* Brought new ideas to QA and load testing teams like service virtualization (mountebank) so that they could mock 3rd party services while testing End to End.

Document Repository Team - The mortgage process relies heavily on documents. To store and retrieve those documents, there is a system called OnBase. Not only does OnBase store and retrieve documents, but it also has a rules engine to allow business rules to route documents in the organization. OnBase uses a combination of file system, with SQL Server database to store documents. It has a .net API wrapper and now, a RESTful API.

* This empowered developers in the company to access documents without our intervention by creating a RESTful API using Hypermedia (HAL media type) to access documents.
* Since the .net API rapper takes time to execute, we used a message queue to drop updates for another windows service to process.
* Utilized cache (Redis) to make sure queries from the RESTful service responded quickly.
* Using free time, redesigned and built a document exporting system to onboard new investors from one week to a couple of hours.
* Document export system processed messages from a queue using Task Parallel Library and a semaphore to control the number of threads that were created.
* The document export system used a workflow-like architecture and plug-in model, using Razor Engine, to dynamically change investors on the fly, reducing wait time on new investors.
* Mentored developers through talks, one-on-one sessions and panels to drive home service oriented architecture, unit testing, API design, continuous integration, SOLID and other topics to give developers a sense that good design is in their reach.

## **New World System – Software Developer** 11/10 to 01/12

Aegis Team – Worked on a suite of client applications designed to improve local municipalities ranging from E911 dispatch systems to record keeping system for police, fire and jail. This project was mainly in VB 6.0 server with some .net clients.

* Improved product stability by fixing bugs.
* Solved legacy issues by becoming a knowledge base for Windows Mobile Barcode scanners, Zebra Printers, Cannon and Sony Cameras, which improved the customer experience.

## **Gongos Research – Software Developer** 05/10 to 11/10

* Implemented a time entry application to optimize user interaction and the tracking of project overhead.

## **Tweddle-Litho Group – Software Developer** 07/08 to 05/10

* Developed on a DVD based application for Chrysler’s first digital vehicle owner manuals.
* Improved an artist workflow collaboration website for international users.

## **Aim Computer Solutions – Intern Programmer** 10/07 to 07/08

* Maintained an application that was an ERP/ Supply Chain Management solution for manufacturers.

## **Mahle Powertrain – Intern** 08/06 to 10/07

* Administered and implemented code changes in TeamTrack and PVCS servers.
* Improved the build process by implementing scripts and C++ applications to automated builds.

# **Education**

## University of Michigan - Dearborn

* Master of Science in Computer Science December 2009
* Bachelor of Science in Computer Science December 2006

# **Training / Conferences**

2015

* Mulesoft API platform training
* O'Reilly Software Architecture Conference 2015

2014

* O'Reilly Fluent Conference
* Kalamazoo X 2014
* API Craft 2014

2013

* O'Reilly Fluent Conference

# **Projects**

* Built blog at <http://www.jordenlowe.com> to become familiar with SEO, Website hosting, Azure and Nodejs
* Created API layer to include different hypermedia formats: <http://www.jordenlowe.com/api>
* Designed IOT (internet of things) bulletin board using Ardunio, raspberry PI and LED tiles: <http://www.jordenlowe.com/title/LED_Bulletin_Board>
* Maintainer of open source project to automatically create RAML specification for an ASP.net web api. <https://github.com/QuickenLoans/RAMLsharp> . The project was recently converted to F#.

# **References**

Available upon request