

# Ryan Anthony Calderoni

**Software Solutions Architect** with 15 years of full-stack software development experience across a range of industries which includes building multi-tenant SaaS products, creating dynamic web applications, implementing REST APIs, managing enterprise integrations, and modernizing legacy systems. Boasts a talent for bridging the gap between sales and engineering with a track record of delivering innovative solutions for growth-oriented businesses and fast-paced startups.

## Summary of Qualifications

- Outstanding communication and writing skills; able to engage clearly and concisely with a range of audiences
- Proven effectiveness working with clients and stakeholders to plan and refine robust software solutions
- Successful team leader and technical mentor, teaching through code reviews and paired programming
- Skilled in requirements gathering, agile sprint planning, test automation, and empowering QA teams

### **SaaS Platform Methodology**

- Design to satisfy first customer needs, build to support future customers through data driven architecture
- Emphasize security and reliability in multi-tenant design through isolated data and compute boundaries
- Empower sales teams with new account provisioning dashboards and easy to customize branding

### **Cloud Microservices & Monolith Decomposition**

- Experienced designing domain scoped microservices for ease of development and tangle-free deployments
- Proficient at understanding business systems and evaluating current needs to avoid regression and waste
- Able to read legacy code in many languages, find and leverage online resources, and document appropriately

### **Single Sign-on Integration**

- Proficient at leading enterprise directory integrations using ADFS, CA SiteMinder, and Amazon Cognito
- Managed client relationships with enterprise contacts, technical liaisons, and third-party developers
- Implemented automated group licensing management for pay-per-user and pay-per-seat subscriptions

## Technical Experience

### ❖ **Microsoft .NET Development**

- C# 11, ASP.NET Core 1.0-7.0, Blazor
- .NET Framework 1.0-4.7, ASP.NET Web Forms, MVC, Web API, & Razor
- ADO.NET, Entity Framework 4-6, Entity Framework Core 1.0-7.0

### ❖ **Cloud Computing Platforms**

- Azure App Services, Function Apps, Cosmos DB, Azure SQL, and Blob Storage
- AWS Lambda, SQS, S3, DynamoDB

### ❖ **Environments & Tools**

- Visual Studio 97-2022, VS Code, Xcode 14
- SQL Server Management Studio
- PowerShell, Git, Subversion, MSTest, xUnit
- Azure DevOps, JIRA, Bamboo, Confluence,

### ❖ **Web Technologies**

- JavaScript, jQuery, TypeScript
- HTML/CSS, Bootstrap, AngularJS, Angular 2+, lodash, npm
- NodeJS, Express, Socket.IO

### ❖ **Database, Caching & NoSQL**

- MS SQL Server, MySQL, Oracle PL/SQL
- Redis, DyamoDB, CosmosDB

### ❖ **Mobile & Game Development**

- iOS native apps, Objective-C, SpriteKit
- Progressive Web Apps
- MonoGame 3.8.1, Aether.Physics2D

## Professional Experience & Notable Projects

### SOFTWARE ENGINEER / 2020 – 2022 / FIRE ENGINE RED

- Mitigated a major server load bottleneck by replacing a high-volume single-threaded e-mail event processing monolith with a concurrent microservice architecture hosted on AWS using .NET Core and docker with DynamoDB, S3 file storage, SQS queues, and Lambda.
- Streamlined QA testing for the above e-mail system by devising a comparison process that isolated identical data inputs for large e-mail campaigns and ran them simultaneously in the old and new systems, comparing and validating the SQL table output to ensure it was an exact match, bypassing a significant amount of manual testing steps.
- Collaborated with the customer success team to identify pain points in the logging output of a bulk user import system then added enhancements to remove noise and improve the readability of log messages, greatly improving the ability of the team to identify errors and preemptively address data integrity issues.
- Worked in agile development sprints migrating backend features from a PHP monolith into a cloud based microservice architecture in C# and .NET Core.
- Continually optimized and refactored existing .NET and SQL backend code to be more performant, readable, testable, and reliable.
- Conducted code reviews and participated in pair programming sessions to increase code quality and provide mentorship training for junior developers.

### SENIOR DEVELOPER / 2019 – 2020 / VAULT CONSULTING

- Performed in-depth code analysis on a complex legacy ASP based report generation application that generated Excel files as part of a monthly report delivery process. This process involved significant manual steps in Excel which were time consuming and error prone.
- Subsequently developed a fully automated and streamlined replacement in .NET Core that included a web-based dashboard console and accepted configurable Excel file templates, allowing analysts to expand and customize functionality and tweak report formulas without requiring any new code to be written.
- Created a customizable automated data capture service to periodically fetch commodity data from the U.S. Census Bureau Trade Data API based on published data release schedules, working with the customer to ensure the data was correct and formatted according to industry norms.

### SENIOR SOFTWARE ENGINEER / 2016 – 2018 / ETS CORPORATION (*ACQUIRED BY ELAVON*)

- Lead multiple ecommerce and payment processing integration projects for a range of unique customers ensuring that new development was correct according to customer requirements, functionality was tested and reliable, and solutions were delivered on time.
- Developed a centralized, secure identity and access control API in .NET Core using JWT tokens to replace disparate identity and login providers across multiple legacy applications with a single cohesive solution.
- Travelled on-site on multiple occasions to observe and evaluate the needs of end-users in a large fast-paced call center environment, identifying multiple pain points and opportunities to streamline the interface and user experience. Collaborated with customer team leads and internal developers to build and test new features and system enhancements.

- Executed an emergency overhaul for a malfunctioning recurring payment system, migrated all payment plans to the new system, mitigating a costly systemic duplicate ACH transaction bug, increasing overall performance, and improving payment plan management controls.
- Managed and mentored multiple teams of junior developers in the implementation of new SPA features using Angular and ASP.NET MVC.
- Provided technical guidance for sales and integration teams in deploying merchant services across a range of consumer and business segments.
- Worked with customer support teams to rapidly identify and resolve customer Point-of-sale and gift card system issues.

#### SENIOR SOFTWARE ENGINEER / 2015 – 2016 / AVIZIA (*ACQUIRED BY AMERICAN WELL*)

- Designed and implemented a portable web-based configuration file management interface for a telemedicine kiosk using HTML and jQuery.
- Supported multiple customer relationship managers in understanding the features and requirements of a robust telemedicine patient appointment management platform, including on-going customized .NET and web development to meet customer demands.

#### SOFTWARE ENGINEER / 2013 – 2015 / ORCHESTRO (*ACQUIRED BY E2OPEN*)

- Supported and maintained an ASP.NET MVC based REST API using Entity Framework and LINQ with an AngularJS SPA front end.
- Contributed to the development of a retail marketing promotion calendar paired with aggregated supply chain data exceeding 2 terabytes per day.
- Supported integration of .NET based supply chain analytics software with Java based MicroStrategy for reports and user management.

#### SENIOR PROGRAMMER ANALYST / 2011-2013 / CORVESTA, DELTA DENTAL OF VIRGINIA

- Collaborated directly with stakeholders and system analysts to adapt business needs into software requirements for ASP.NET insurance adjudication and provider search system including multi-organization Single Sign-On via CA SiteMinder & ADFS.
- Developed HTML-5 viewing interface for reviewing chronological dental procedure records; making it easier to detect fraud.
- Upgraded a deprecated dental x-ray viewing application from a 16-bit Windows desktop implementation to a modern web-based interface.

#### WEB DEVELOPMENT COORDINATOR / 2008-2011/ KEYSTONE LEARNING SYSTEMS, GLOBAL LEARNING SYSTEMS

- Developed and enhanced ASP.NET MVC learning management solutions using C#, LINQ to SQL, SQL Server, Windows Server, and VMware ESXI.
- Coordinated the development and integration of enterprise-aware access solutions, user & roles management, and single sign-on using Active Directory Federation Services (ADFS).
- Worked with government entities such as the Department of Education and NTSB to develop and test security awareness training software, including in-depth accessibility solutions for 508 compliances.

#### BACHELOR OF SCIENCE, INTERDISCIPLINARY STUDIES / LIBERTY UNIVERSITY

- Computer Science, Business Information Systems, Graphic Design
- Human Computer Interaction & Software Accessibility