**PROFESSIONAL SUMMARY: Software Designer / System Architect**

With 15+ years as a full-stack software engineer, I have cultivated my reputation as a highly productive technical leader keen to collaborate and solve problems. My approach leverages an appreciation for automation and process improvement. I natively recognize areas where we can make gains and improve processes for both humans and software. Combined with an aptitude and curiosity for learning, I am flexible, and readily leverage my existing knowledge and experience to uncover meaningful insights.

These insights allow me to support, coach, and build solutions with and for cross-functional product delivery teams. Solutions might range from domain-specific languages to reduce the cost of ownership to test automation for cheaper deployment with higher confidence. I have embraced challenges, from massive volume to high concurrency, internal issues, B2B, or consumer-facing. I’ve worked with most configurations from monoliths to microservices as well as from greenfield to decades-old systems.

***It makes me happy to solve problems, build teams and save my clients time and money.***

**Professional Experience**

**FOUNDER | POSSUM LABS | DENVER, CO JAN 2018 – PRESENT**

In 2018, the consulting company discovered a possibility for a product. We then developed and built a user-friendly web app for organizations’ business experts to describe desired outcomes for software in customizable domain-specific languages. This work has amplified my commitment to working towards successful software development in all businesses. Today I look forward to leveraging this experience to support a like-minded, growth-mindset organization that invests in its people while understanding that problems can become solutions and that ultimately anything is possible.

• Outcomes: we enabled our clients, including those with legacy systems, to capture, retain, and activate their institutional knowledge to react to customer needs without unintended consequences.

• What we did: we tested, changed, refined, executed, and communicated, until the combination of risks, timelines, and financials led me to reconsider my broader goals and shut down development.

• GitHub: <https://github.com/PossumLab>

*The solution utilizes .NET Core & Angular and is hosted using Docker and Kubernetes in Azure. Some aspects of the product live on as open-source packages.*

**CONSULTANT for Possum Labs | ENVISION | DENVER, CO NOV 2017 – MAY 2019**

Commissioned to build a test framework to simplify and illuminate automated testing for customer representatives and customers. I enjoyed the challenge of analyzing the issues and identifying what could be done better. Our solution leveraged natural language for test definition, making it so the reading, maintenance, and creation of automated tests became accessible to subject matter experts who lack a programming background. Continued to provide technical support and mentor QA members post-contract.

**CONSULTANT for Possum Labs | STARZ ENTERTAINMENT | DENVER, CO OCT 2016 – OCT 2017**

Working remotely and in the office, my work entailed spearheading two distinct automation and testing projects. This required coordinating across departments and cooperation from various stakeholders to ensure the development of frameworks that deliver a high level of confidence.

• The first project required the designing of an automated testing framework for backend services consumed by mobile and web platforms. For this project, acceptance tests ran in Docker containers utilizing Cucumber for Javascript.

• The second project focused on creating an automated performance test framework that requires simulating up to half-million concurrent users watching content. Built using Node, Angular 2, and Typescript, this framework effectively tests production conditions.

**CONSULTANT | TRIMBLE | DENVER, CO FEB 2016 – AUG 2016**

Charged with actively mentoring a team of test engineers in designing and implementing a new and more efficient framework, I relied upon my skills in both people and processes to successfully achieve our end-goal. The completed project is designed to interact with an existing ESB architecture built on Kafka, using both Specflow and Selenium.

• The framework achieved the stated goals, including reducing the volume of code required by 80% and increasing delivery speed three-fold.

• Adopted for use by teams in New Zealand and India, the final product has also improved the capacity to address increasingly complex front- and back-end and integrated scenarios.

**CONSULTANT for Possum Labs | GLOWPOINT | DENVER, CO NOV 2014 – NOV 2015**

Collaborated with the Glowpoint team to design and implement an Exchange synchronization solution. I achieved project goals through innovative product design, including a solution that allows Exchange users to add services to meetings without the need for plug-ins.

• The product is compatible across all platforms and clients (Outlook, etc.).

• In addition, this fault-tolerant solution required no client-side deployment of software and was implemented using Exchange Web Services (EWS), C#, and SQL Server.

**CONSULTANT for Possum Labs | COBANK | DENVER, CO OCT 2013 – NOV 2014**

Led architecture and development on the rewrite of an internal data maintenance application. We accomplished the goal of updating to supported technology, reducing the cost of ownership, and improving the user experience by utilizing discovery rather than configuration, code generation, and focusing the user's attention on related and applicable data.

• Prior to this project, I assisted with the rewrite of a different CRM system with the same company.

• Both projects were in ASP.MVC with a JavaScript-based UI utilizing EXT.js.

**SENIOR TECHNICAL CONSULTANT | MORTGAGE CADENCE | DENVER, CO MAY 2011 – OCT 2013**

As Senior Technical Consultant, I led a team providing technical leadership for a SaaS product that generates contracts for mortgages. We successfully achieved the aggressive expansion of the customer base as well as the internal administration staff. This success came through focusing on communication so that all stakeholders were able to participate and offer insight, creating optimal solutions.

• Created, led and mentored a cross-functional team to increase production capacity.

• Expanded tooling for team’s document experts and expanded product offering using 3rd party integrations.   
• Introduced automated testing and automated deployments.  
• Introduced better metrics for production operations and the business owners.  
• Analyzed the drivers for interim releases and introduced a rules engine to eliminate those releases.

• Technologies used were ASP.MVC 4 Web API, Windows Presentation Foundation (WPF), C#, and SQL server.

**CONSULTANT for Possum Labs | PDC | DENVER, CO FEB 2010 – MAY 2011**

In this consultant role, I architected and implemented a fault-tolerant, redundant, distributed, load balancing processing platform in C# over WCF. Designed and implemented an XML-based rules engine for record processing. The system used DB2 & SQL server databases.

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### CONTRACTOR | TSYS iSOLUTIONS | DENVER, CO NOV 2008 – JAN 2010

### Designed and implemented a business rules engine that could be maintained by the end-user in real-time through a web interface. Users could define rules in a SQL-based Domain Specific Language. Refactored a number of high-usage queries to improve performance and reduce complexity. The project was implemented using Scrum and C# (WCF, WPF, LINQ), ASP.NET (Telerik), and SQL server.

### CONTRACTOR | NATIONAL CINEMEDIA | DENVER, CO JUN 2008 – NOV 2008

### Facilitated the selection of a 3rd party development company to assist the existing development team. The selection was based upon the results of code and design review, as well as estimates of the quantity of work delivered. Designed and implemented back-end systems for a rich UI website written in Flex. The back-end was written in C# with SQL server. My focus was on searching algorithms, API integration (OpenID & Amazon), the notification subsystem, and cross-data source aggregation and normalization.

### LEAD DEVELOPER | FETTER LOGIC, INC. | DENVER, CO JUN 2007 – APR 2008

### I led the development of a new product in the financial services reporting suite to build on normalized data from multiple sources in ASP.NET and with a SQL server. We worked through the initial release and the first service release. The project had 10 developers. We overcame challenges including staff turnover, performance, and limitations based upon initial design decisions by troubleshooting and focusing on best practices.

### SR. SOFTWARE ENGINEER | MANIATV! | DENVER, CO AUG 2006 – JUN 2007

Collaborated in the design and implementation of a website hosting live internet television and user-generated content. The solution was implemented in C# and ASP. The backend was an n-tier architecture written in C# and SQL Server. My focus was on internal tools, as well as site and data analytics.

### SOFTWARE ENGINEER | GAMBRO BCT | DENVER, CO MAY 2004 – AUG 2006

Participated in design and implementation service for medical devices. During this time I designed and implemented a device communication module utilizing TCP/IP. Implemented in C#.

**Computer Skills**

**Programming Languages:**

|  |  |  |
| --- | --- | --- |
| ASP.NET (10+ years)  C# (10+ years)  HTML / CSS (10+ years) | Java Script (10+ years)  SQL (10+ years)  T4 (6 years) | Typescript (4years) |

**Technologies & Competencies**

|  |  |  |  |
| --- | --- | --- | --- |
| ADO  Agile practices  Ajax for ASP  Analytics  Angular  AngularJS  ASP.MVC  Automated build  Automated Deployment  AWS  Azure  BI  Bootstrap  CI/CD Compliance | Cloud Computing  Communication Skills Design patterns  Docker/Kubernetes  Enterprise Library  Entity FrameworkEWS  Ext.js  GraphQL  Groovy  Infragistics  Internationalization  IOC  HTML5  Jenkins | jQuery UI  JSON  LINQ to SQL  MongoDB  .NET (since 1.1)  .NET Core (since 1.0)  Ninject  Node  NoSQL  OOP  CI/CD Compliance  PowerShell  Rhino Mocks  Responsive Design  RESTful Web Services | Sass  Scrum  Selenium  SignalR  SOA  SpecFlow  StructureMap  TCP/IP  Telerik  Unit testing  Unity  WCF  Web API  WF  WPF |

**Operating Systems:**

Windows (95 through 8 & NT 4.0 through 10)

Unix (Solaris, FreeBSD, OpenBSD, AlpineLinux, Redhat)

**Software Packages:**

|  |  |  |
| --- | --- | --- |
| ANTS Performance Profiler  Azure DevOps  CodeRush  DB2  Ethereal  Git  Microsoft Office | MySQL  NUnit  Omniture  Oracle  Source Safe  SourceGear Vault  SQL Server | Starteam  SVC  Visio  Visual Studio  Visual Studio TFS  VSCode |

**Education**

Dual B.S. Computer Science & Mechanical Engineering | University of Colorado at Boulder | 2004

**Languages**

English (fluent), Dutch (native proficiency), German (2 years), French (3 years)