

## Introduction

I'm a full stack engineer with a love of data, the integrations that move and transform the data, and the database that store and query the data. I'm also a proficient developer of the web applications, REST APIs, and BI tools that unlock data for users. I have a strong history of self-direction on complex projects and a natural ability to ramp up quickly and work autonomously demonstrated by the award of a degree in Computer Science at the age of 19.

I believe that my best traits are:

- I'm able to adapt to new teams, technologies, roles, and businesses.
- I'm <u>dedicated and disciplined</u>. Simply put, I give a damn about the products and teams I work on.
- I'm honest and ethical, quick to admit mistakes and take accountability for the issues they cause.
- I'm a conscientious team member and I work hard to deliver high-quality solutions.
- I'm <u>resilient and persistent</u>. If a problem comes up, I'll work to find a solution and keep the project on track.

I use the philosophy of "learn by building". My refusal to specialize has become a strength as I've developed into a polyglot developer (many languages and platforms) that can serve a team as a switch-hitter. While my strongest abilities are in the areas of database development, integrations, and REST API development, I strive to be language and platform agnostic. This allows me to contribute to all layers of product development including web applications (React), .NET and .NET Core apps, Data Warehouses, and cloud architecture (Azure, AWS).

In 2017 I co-founded Switch Architecture to give customers a way to access expert software engineers, integration developers, data architects, and DBAs without having to spend months recruiting, interviewing, and competing for the best people. As a technology leader, I saw the constant effort being spent on recruiting and the risk it brought if leadership wasn't able to add the right people to the team.

Before Switch Architecture, I spent almost three years developing my senior leadership and rapid application development skills in Director, Vice President, and Principal Engineer roles at a growing healthcare predictive analytics company and winner of the Nashville Early Stage Company of the Year award and top-four finalist for Harvest Business School's Health Acceleration Challenge.

I have found I enjoy the flexibility, pace, and spirit of early-stage companies, and the challenges and opportunities they bring. I also love consulting, the constant learning it requires, and the immediate impact that my efforts have on a customer's business.

### **Education**

- Bachelor of Arts in Computer Science, Harding University, 2005. Graduated at the age of 19.
- Associate of Science, Cuesta College, 2003. Graduated at the age of 17.



## **Co-Founder, Partner at Switch Architecture**

April 2017 to Present

I co-founded Switch Architecture to give customers a way to access expert software engineers, integration developers, data architects, and DBAs without having to spend months recruiting, interviewing, and competing for the best people.

As a technology leader, I saw the constant effort being spent on recruiting. I also saw the risk it brought to the product roadmap and company vision if leadership wasn't able to add the right people to the team at the right time (or worse add the wrong people to the team).

Many of Switch Architecture's engagements can be described as "rescue" projects where a project is behind schedule, over budget, and at risk of failure. These engagements typically begin as a code review to help stakeholders understand exactly what has been delivered and the actual effort required to complete the project. In most cases, Switch Architecture's experience can help bring the project over the finish line in an expedited manner.



## **Principal Engineer at Switch Architecture**

April 2017 to Present

In my role as Principal Engineer, I serve Switch Architecture's customers as an expert developer who can design, develop, release, and support every layer of a software platform. I am accountable for projects being delivered on-schedule, on-budget, with the highest quality standards, and meeting or exceeding the client's expectations and requirements.

## **CONTRIBUTIONS**

- The rapid development of a consumer-facing web app and REST API for opening, funding, and gifting to college savings plans. Primary technologies were React and .NET Core v3. Azure SQL DB, App Service, Functions, and Storage features were used for a serverless platform.
  Numerous integrations include Docusign for knowledge-based authentication and digital signatures, and Plaid for financial account linking.
- Data warehouses and integrations for customers in the healthcare, manufacturing, warehousing, and supply chain industries.
- Integrations with e-commerce and product management platforms including Magento, WooComerce, and Salsify. Includes automation of product changes, near real-time management of on-hand quantities, and fulfillment of customer web orders through ERP integrations.
- ERP and warehouse (WMS) integrations for sales orders, products, inventory, shipping, and forecasting.
- Salesforce Marketing Cloud integrations for near real-time synchronization of leads and accounts with ERP for customer interactions via e-mail and SMS.
- Salesforce custom object development and integrations with ERP system. Includes custom objects, tasks, and flows.
- Developed and supporter numerous BI and reporting platforms built with Looker, Tableau, and SSRS.



## **Independent Contractor**

December 2016 - April, 2017

A brief period of independent contracting for multiple customers prior to founding Switch Architecture.

#### **CONTRIBUTIONS**

- Senior database engineer supporting an established team with the design, development, and rollout of a large Data Warehouse and the ancillary processes, tools, and integrations that support and drive it.
- Architected and implemented an enterprise job scheduler platform for executing a high volume of scheduled ETL processes (SSIS). Used a Producer/Consumer solution with an intermediate job queue mechanism to support throttling.
- Served client as an expert technical resource and appeared before a federal judge in United States District Court to perform a technical demo, share findings, and answer questions related to product features and capabilities.
- Triaged a sudden increase of deadlocks in a production OLTP system. Provide development team with an explanation of behavior and a recommended solution to lower the deadlock rate to zero.
- Implemented and supported a transactional replication topology in a large federated SQL Server environment.
- Implemented development patterns, identified limitations, and defined best practices for a development team's use of the new temporal (history) tables feature in SQL Server 2016.
- Developed complex SSIS packages and assisted the development team with the creation of SSIS development patterns, best practices, and code reviews.
- Supported production applications through complex extracts and DML queries.
- Advised clients on maintaining HIPAA compliance in the Amazon Web Services cloud.



# VP of Engineering, Principal Engineer at Medalogix

May 2014 – December, 2016

I'm glad to have been an early member of the Medalogix team - winner of the 2016 Nashville Technology Council's "Early Stage Company of the Year" award. In multiple roles as Director of Engineering, Vice President of Engineering and Principal Engineer, I assisted the company in reaching major milestones by providing expert vision, execution, mentorship, and support at every level.

#### CONTRIBUTIONS

- Member of the company's Senior Leadership Team and accountable for all technology team activities.
- Recruiting for current and future engineering positions.
- Served on the web application (C#, ASP.NET MVC), database (T-SQL, SQL Server), systems (AWS, Windows Server), risk/security/compliance, corporate IT, and integration teams as both a peer and servant leader.
- Provided architecture, development, release, and project management support during the delivery of three new customer-facing predictive analytics products.
- Migrated enterprise platform to the AWS Virtual Private Cloud to reduce costs and improve uptime. The result was a 50% reduction in monthly infrastructure costs, 99.998% platform uptime, and reduced RTO/RPOs.
- Served as an engineer in the development and support of a multi-tenant, federated data warehouse that utilized many shards for horizontal scaling, table partitioning for low-impact data loads, and peer-to-peer transactional replication for global configuration management.
- Design, implementation, and support for multiple partner data integrations.
- Executed annual HIPAA Risk Assessment program and completed regular security questionnaires from prospective and current clients.
- Chartered a formal Information Security Program to ensure proper security controls are in place and to prepare the company for a formal SOC II report. Added a full-time IT Security, Risk, and Compliance Manager to manage security policies, training, and systems.
- Accountable for the creation and completion of the company's technology, security, and IT roadmaps



# Senior Database Developer at Global Healthcare Exchange

November 2011 – May, 2014

Senior engineer on the Contract Center Xpert (CCX) application used by healthcare providers to maintain accurate contract item pricing through real-time purchase order price validation backed by an ASP.NET MVC web application detailing pricing history.

The CCX OLTP database persisted data for 4 billion contract healthcare products and 8 million healthcare contracts. The applications received over 2 million item price requests each day from other services in the company's global product suite. These complex requests were satisfied with an average duration of 25ms through effective query tuning and database design.

My role included database, web, and application development responsibilities with an emphasis on query optimization, data architecture, and ETL processes using Microsoft SQL Server 2008 R2 and the Microsoft .NET framework (C#). I also served in a rotating Scrum Master role.

# Web Application Developer at Shareholder Insite

April 2010 - November, 2011

An early-stage company working to innovate and improve how private companies manage their cap tables and perform analysis on outcomes of potential exit scenarios.

As an early member of the company, I served as the web application developer, but also in a jack-of-all-trades IT and sysadmin role as the company's network, employees, and building space grew.

- Developed a web-based SaaS application using ASP.NET 4.0, C#, SQL Server 2008 R2, AJAX,
  WCF Web Services, and Javascript in a RAD development lifecycle
- Administered SQL Server databases and instances; administered Windows Servers, corporate network, Active Directory, VPN, and workstation/server backup policies.
- Installed and administered the JIRA issue management system and SVN source control repository.

### **Earlier Positions**

- Database Administrator, Team Lead at Global Healthcare Exchange
- Database Administrator at Investment Scorecard / Informa Investment Solutions
- Programmer Analyst at Investment Scorecard / Informa Investment Solutions