

■ Profile

A passionate software architect with 8+ years of professional .Net experience in launching and maintaining enterprise software. A developer that believes in collaboration, delivering early, and feedback-driven decisions. An active project lead and architect of multiple year-long projects for the past 4.5 years. A leader driven by dedication and accountability to his team, project, client, and employer.

■ Expertise

- **Languages** C#, JavaScript/ Typescript, CSS, HTML, SQL
- **Methodologies** Agile, Lean, Scrum, Kanban, TDD, Prototyping, MVP
- **Tools & Technologies** Entity Framework Core, .NET/.Net Core, Azure, Web API, AngularJS/ Angular 2+, Azure Dev Ops, Azure Pipelines

**Professional Experience: Aptera Software**

Software Architect '16 – Present

Sr. Software Engineer '14 – '16

Software Engineer '11 – '14

■ Responsibilities & Roles

**Project Lead**

- Guide teams using Agile principles.
- Fill gaps with team roles (QA/PM/BA/SM).
- Continuously position project towards success.
- Facilitate a healthy team environment.

**Architect**

- Scaffold, design, and approve technical solutions.
- Asses and estimate contract proposals.
- Collaborate on company-wide initiatives.
- Lead internal learning initiatives.

**Mentor**

- Provide counseling and coaching to co-workers.
- Develop growth strategies for teammates.
- Serve as an escalation path.
- Cultivate a safe space.
- Listen.

**TDD Coach**

- Integrate with and coach teams in the ways of TDD.
- Guide teams into successful positions by leaning on Agile processes, tools, and techniques.
- Openly discuss the difficulties and misconceptions of TDD.

**Consultant**

- Collaborate with the client in constructing the best business & technical plan for a project.
- Escort the client through the Agile process.
- Bridge the gap between the technical and business decisions.

## ■ Enterprise Projects

### Resource Management & Interactive Guide, Web App

03/2018 – 07/2019

As the architect and project lead, one of my first tasks involved reviewing and refining the backlog. I ended up discovering 3 times more work than was original planned. I presented an in-depth, iterative action plan for the client that was well received, which enabled us to proceed without unnecessary stress. Throughout the life of the project I guided the team using Agile, Lean, and Kanban values. Since most individuals on my team were inexperienced, much of my initial effort was balanced between pairing, mobbing, scaffolding, and establishing team rhythm. A primary feature of the web app was a sophisticated search engine. I prototyped a version of search using Azure Cognitive Search but ended up using Elasticsearch due to its extensive customizability. The App itself went through multiple iterations to reach a standard AA ADA compliance, with toggleable features that enabled AAA compliance. I also designed a self-populating, multilingual-content dictionary which leveraged Google Translate API and Cosmos DB. Our launch day was arranged to be broadcasted live on several new stations across the state. In preparation, I performed extensive load testing using JMeter, with a goal of supporting a theoretical ~30,000 concurrent users. As a result of my findings, I transitioned our N-tiered architecture to a distributed architecture while leveraging Azure's horizontal scaling mechanisms. I also migrated our tech stack from .Net Core 1.x and Angular 5.x to .Net Core 2.x and Angular 7.x for large performance gains.

### E-commerce & Assembly Line Integrated Web App

02/2017 – 02/2018

I rolled on to this project as the architect and project lead after negotiations with the client had concluded. My auxiliary assignments were to teach my team Test-Driven Development, introduce them to Angular, and asses Sitefinity. Soon into the project I realized there was a severe mismatch in the expected and actual work required. I quickly began difficult conversations with leadership and the client about the reality of the project. After much discussion, I presented an iterative rollout plan which lead to the client and I developing a trusting and open relationship. I leveraged several legacy refactoring techniques to enable us to test our inherently coupled Sitefinity customizations. I spent a great deal of my time understanding the client's internal workflow, ERP system, and inventory structure. This enabled me to build a custom integration that fed orders from the Web App directly into their assembly line workflow and restructure data to allow us to develop a user facing Item Configurator. I developed a robust fault tolerance mechanism for the order pipeline to counter-act the frequent ERP down-time issues. I also implemented several automatic syncing services that would sync the ERP's and web app's inventory, orders, and users.

### Staff Augmentation Consultant & TDD Coach

05/2015 – 01/2017

Over a 1.5-year period I worked on-site with a well vetted client. I had the unique experience of consulting multiple teams on the ways of Test-Driven Development. My colleague and I hosted several multi-day workshops, where we would present the concepts, demonstrate the concepts through live coding, and finally mob with the teams. After we gave several presentations, I integrated with some of the teams as a TDD coach. My day would involve pairing, mobbing, re-educating, discussion pains and techniques, as well as setting up tools and systems such as a CI/CD pipeline to help them continue building their habit. Once I made my rounds to several teams I was pulled in as a Tech Lead for an internal inventory ordering system. The primary duty was upgrading the catalog system and integrating with Hawk Search to enable faster searching. Unfortunately, the solution was quite monolithic and the portion we were tasked with improving was blocked from being disconnected from the primary system or upgrade to a more modern web application framework. We settled on adding knockout.js to boost the UX and begin modernizing the system by migrating logic from server side to client side. As a team we added 1200+ UI tests and the tools to enable the continued use of Test-Driven Development.