# Zac Zacal

Senior Software Engineer, Seattle

[github](https://github.com/zzacal), [linkedin](https://www.linkedin.com/in/zac-zacal)

## Senior Software Engineer - Alaska Airlines

Sep 2020 - Present

**Lead** the modernization of the lounge membership system from a monolith to microservices, enhancing sign-up and payment processes, and significantly reducing deployment times from a week to minutes using Docker containers on Azure Kubernetes Service.

Lead the modernization of the lounge admission application from simple calls to a sql database to an asynchronous, load-balanced using Azure Functions and Service Bus topics, improving resilience to disruptions and integrating a hybrid storage strategy with both document and SQL databases for flexible data management and reporting.

Lead the modernization of the reservation management system from a monolith to microservices, handling 3.5 million daily requests with high reliability through advanced Azure App Services features like auto-scaling and slot-swapping.

I championed the establishment of a unified payment experience for products across web and mobile platforms, reducing PCI compliance scope and integrating digital wallet capabilities like Apple Pay and Guest Card On File. The amount of dev hours we will save every year by keeping teams outside of PCI scope is hard to measure, but the relief dev teams and leaders are feeling from avoiding more PCI attestations is very strong.

I started and led workshops for engineers on career development and software engineering best practices, mentoring an intern and a senior software engineer to foster a culture of learning and professional growth.

**Tools**: dotnet, c#, react, svelte, express.js, typescript, docker, various Azure cloud resources

## Software Engineer - Socrata/Tyler Technologies, Data and Insights

Aug 2019 - Sep 2020

Contributed to and maintained the data discovery platform, which helped users search through their organization's datasets.

Improved the search bar by adding suggestions as users typed search terms.

**Tools**: scala, java, ruby on rails, react with typescript, aws, mesos

## Owner, Software Engineer - Zacal Consulting

Dec 2016 - May 2019

### Senegence

Designed and built an ecommerce solution for MakeupRescue.com that uses .NET Core and MongoDB on Azure and Mongo Atlas.

Lead the expansion of the Senegence ecommerce application QuickOrder into international markets using .NET Framework, Angular 5, and MSSQL. These applications were deployed to Azure App Services and Azure-hosted VMs.

Integrated PayPal and Square Payments into the Senegence hosting application, Senesite, with a solution built with .NET Core and deployed as a Docker container on Azure Kubernetes Service.

**Tools**: dotnet, react, c#, javascript, azure, azure devops

### STR Helper

Designed and built an ETL solution for STR Helper that cleansed data from disparate sources using .NET Framework MVC, and MongoDB. This shortened the ETL process from a week per client to one or two days.

Designed and built a geojson-powered data-gathering solution for STR Helper that queried external systems based on a city or a county's geojson polygon. This application used .NET Framework MVC and MongoDB's gis features to automate what was an intense manual process.

**Tools**: dotnet, react, c#, javascript, azure, azure devops

### Alergan

Lead the Allergan rebuild and redesign of the reward program Brilliant Distinctions. The application was built on Sitecore CMS which is implemented on .NET Framework. I implemented scrum methodologies for the development team. This resulted in better tracking of work from the previous process and contributed to meeting due dates.

**Tools**: dotnet, c#, javascript, azure, azure devops

## Senior Software Engineer Renovate America

Jan 2016 - Dec 2016

Lead the development of the marketing content management system built on Sitecore.

Partnered with marketers and content authors to build a dynamic and flexible content platform that empowered content authors to publish rich promotional and informational pages within minutes.

**Tools**: dotnet, angular, c#, javascript, azure, azure devops

## Web Application Developer

Apr 2013 - Dec 2015

Contributed to flagship brand marketing web applications BrilliantDistinctions.com, BotoxCosmetic.com, Juvederm.com using ASP.NET MVC.

## Education

2010-2013

Cal State Fullerton, College of Business and Economics

BA Information Systems and Decision Science

## Side Projects

### SchemeIdol

[schemeidol.com](https://www.schemeidol.com/) is a web version of a popular minigame that my friends and I like to play. We are currently and indefinitely trying to beat each other’s high scores.

### Tilda

[tilda](https://github.com/zzacal/tilda) is a mocking tool to help me work without relying on dependency services. My team currently uses tilda to speed up local development.