

## Michael Zarate

2800 Sunrise Road Apt#1428, Round Rock, TX, 78665 • 480-297-8161 • [michael.zarate.ce@gmail.com](mailto:michael.zarate.ce@gmail.com)  
[www.linkedin.com/in/zaratemichael](https://www.linkedin.com/in/zaratemichael) • [www.github.com/DRpandaMD](https://www.github.com/DRpandaMD) • [www.portfolio.zaratedev.org](http://www.portfolio.zaratedev.org)

### Work Summary

Software engineer with 6 years of experience with working with teams to design, build and troubleshoot various systems. Builds serverless websites in AWS with Lambda and S3. Deploys highly available and resilient systems in AWS using EC2 autoscaling groups and RDS.

### Technical Skills

- Cloud, AWS: EC2, S3, CloudFront, Route 53, API Gateway, Lambda, CodeBuild, CodePipeline
- Programming Languages: Python, JavaScript, Ruby, C#, Swift
- Operating Systems: Windows, OSX, Linux
- Tools: Jenkins, JetBrains IDE, Xcode IDE, Microsoft Visual Studio, Microsoft Office

### Experience

#### Sr DevOps Engineer

Halfaker and Associates, Austin, Texas

October 2019 – Present

- Manage client's production Systems
- Manage Linux environment
- Implement automated infrastructure configuration management with Terraform
- Create CI/CD pipelines with Jenkins
- Focus on delivering highly available, fault tolerant systems in AWS and Azure.

#### Application Engineer

Dell Technologies, Round Rock, Texas

February 2017 – October 2019

- Application Engineer lead for finance and sales. Responsible for deploying code, monitoring applications, and supporting Federal production and operations.
- Identified coding discrepancies and assisted in implementing best practices for greater application deployment efficiency, keeping in compliance with SOX and NIST 800-171
- Lead solution designer for creating the Federal "Break Glass" tool to meet security requirements on privileged access to production systems, with automation and integration in the Cherwell ITSM tool.
- Deployed Gitlab with LDAP integration into a lab environment to demo to leadership the power of modern version control and CI/CD.

## Software Engineer Internship

Commscope, Tempe, Arizona

June 2016 – August 2016

- Established an automated integration testing infrastructure with an MSBuild script running unit tests, creating and establishing database schemas, migrating data with fluent migrator and SQL Server, and performing integration tests.
- Developed a new design prototype using Microsoft Entity Framework, Entity-Attribute-Value (EAV), Repository and Unit of Work design patterns.
- Tested functional changes to code by measuring and validating performance of features between major released and unreleased versions.
- Incorporated Stakeholder Review Feedback by streamlining the user interface of the configuration application as part of Agile methodology.

## Education

### Bachelor of Science in Engineering

Arizona State University, Tempe, Arizona

Computer Systems Engineering

December 2016

G.P.A. 3.5

## Academic Projects

### Systems Capstone Project

- Led a team of bright engineering students on a yearlong project.
- Collaborated and designed with team to build an automated shutter system.
- Delegated subtasks to team members that best reflected their skills and interests.
- Developed high-level system design and architecture.
- Created design diagrams at system and component levels.

### iOS App

- Developed an Address Book application with an integrated map for iOS.
- Created a multi-view application utilizing CoreData, MapKit, and Segues for navigation.
- Configured Core data for permanent storage of user data.
- Implemented MVC architecture into application design pattern.

### API Driven Web App

- Co-Developed an API-driven web application to provide the user localized information of tracked, favorited, and rated locations within the area.
- Built application's core with APS.NET and Web Forms.
- Created custom APIs and hosted the endpoints, simplifying API calls to provide clean data to the user.
- Created API functionality with Yelp to get geocoded-based locations of stores, available products, and customer ratings.
- Created API functionality using OpenWeatherMap to provide local weather information.

## Personal Projects

- Deployed a fault tolerant, highly-available WordPress site across multiple Availability Zones with AWS RDS, EC2 Auto-Scaling Groups and EC2 Volume Snapshots.
- AWS based serverless portfolio with ReactJS front end, housed in an S3 bucket, deployed with an automated CI/CD pipeline with GitHub, AWS CodeBuild/CodePipeline, AWS Lambda
- AWS based serverless blog using Hexo, AWS S3, AWS Route 53, and AWS CloudFront
- Use Terraform to automate provisioning and deployment of autoscaling group of Apache Web Servers behind an Elastic Load Balancer in AWS
- Python Flask Web Apps. Key functionalities: Google and Facebook OAuth2 login, CRUD functionality with user data using SQL Alchemy; Front End: Bootstrap, Google Geocode API, Foursquare API

## Certificates

- CloudBees University: Jenkins – Fundamentals
- CloudBees University: Jenkins Administration – Fundamentals
- CloudBees University: Jenkins Pipeline – Fundamentals
- Docker Mastery: The Complete Toolset from a Docker Captain