# Max McCorkel

## **SUMMARY**

Experienced backend software engineer with a mathematics degree from Cal Poly, San Luis Obispo. Passion for designing and creating quality microservices and databases using .NET or Java Spring Boot on the Azure or AWS clouds.

## **EXPERIENCE**

#### **Technology & Marketing Consultant**

#### Self-Employed

- Created cloud-based digital marketing solutions to empower customers by employing new marketing pathways that reach a larger audience.
- Engineered cross-channel marketing strategies that increased client lead generation.

#### AI Model Trainer

#### Outlier

- · Identified prompt responses from AI models that break safety rules or deviate from accepted parameters.
- Researched topics and created new responses to train AI models according to project guidelines.

#### **Systems Engineer**

#### **Photon Medical Communications**

- Developed Azure Active Directory B2C client to support federated user login and authentication on Web, Android, and iOS apps with Google, Apple, or Microsoft accounts.
- · Created Azure cloud resources to store and retrieve incoming DICOM and HL7/FHIR data from hospital systems into Azure FhirAPI and SQL databases.
- Built backend microservices to support real-time chat between users with Azure SQL Databases, Azure Functions, and .NET Core APIs in C#.

# Senior Software Engineer

#### Carvana

- Designed, created, and lead project for a new .NET Core microservice that used different strategies for automatically calculating a customer's income from an uploaded paystub document.
- · Designed data structures and schema for SQL Tables used in new Paystub Income Calculator microservice, and then tested and deployed SQL table creation scripts and SQL query scripts.
- · Created Figma diagrams explaining data flow and events between microservices.
- Used SSMS, Azure Data Studio, and Splunk to write scripts to monitor the progress of validation requirement fulfillment.
- · Created a microservice to automatically validate an uploaded proof-of-address document according to that customer's county or state title and registration rules.

### **Backend Software Engineer**

# Homie

- Developed .NET Core services and APIs in C# used by the Homie web and mobile apps to allow customers to input information and publish homes for sale online.
- Created integrations between Homie backend services, 3rd parties, and Microsoft Dynamics to sync data between marketing partners.

# Senior Software Engineer

### MasterControl

- Integrated ElasticSearch servers and implemented an indexing strategy that allows search queries on encrypted document contents.
- Refactored checklist module using Angular 8 frontend and Java backend to allow more flexibility when uploading documents or launching tasks for clinical trials and FDA registrations.

# **Software Engineer**

### **General Atomics Aeronautical Systems**

- Developed features for the Claw 3 mission management software.
- Replaced the backend SQL database and Claw 3 data access layer with MongoDB that runs locally or as a RESTful web service.

# Android Software Engineer

### **Chronicle Technologies**

- · Lead development on the Chronicle Android app, which gives disaster-recovery field agents access to job information, navigation to job sites, company email & photo uploads, and labor time logging.
- $\cdot$  Coordinated updates with backend and iOS teams.

# December 2020 - February 2022, South Jordan, Utah

#### December 2016 - September 2018, Layton, Utah

# December 2014 - December 2015, Remote/Riverside, California

October 2018 - July 2020, Cottonwood Heights, Utah

# April 2022 - March 2023, Tempe, Arizona

May 2023 - November 2023, Scottsdale, Arizona

# July 2024 - Present, Remote

April 2024 - Present, Remote

#### **Associate Software Engineer**

### CygNet Software

· Helped create a flow measurement system for oil and natural gas.

· Created a new calculation engine based on industry standards that determined standard values and meter accuracy from pipeline variables.

# Associate Software Developer

E\*Trade Financial

- Developed the necessary code to analyze and detect ongoing fraud trends.
- · Created code to generate dashboards for management to review daily fraudulent transactions and lost trades.

# **EDUCATION**

## **Bachelors of Science in Mathematics**

California Polytechnic State University, San Luis Obispo · San Luis Obispo, California · 2010

• Emphasis on applied math/computer science.

# CERTIFICATIONS

#### AI-900 Microsoft Certified: Azure AI Fundamentals 2024

AZ-900 Microsoft Certified: Azure Fundamentals 2023

Amazon Web Services Cloud Practitioner 2019

**Certified SAFe 4 Scrum Master** 2019

#### June 2012 - September 2013, San Luis Obispo, California

#### August 2010 - November 2011, Menlo Park, California