Devan Lad

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OBJECTIVE:
Seeking a full-time position in Software Engineering.

EDUCATION:
M.S. Software Engineering, 2022, Rochester Institute of Technology, 4.0
B.S. Software Engineering, 2020, Rochester Institute of Technology

RELEVANT EXPERIENCE:

Software Engineering Co-op - Rochester, NY CaterTrax   **10/2019 to 12/2019**
Tasked with determining the limits of Catertrax's product. Executed performance tests and analyzed data to determine the performance limits for Catertrax's current production.
- Designed and developed front-end scripts using Blazemeter Chrome Extension based on the most active workflows of the websites like log in or make an order
- Created an SQL Script that populates a database with unique customers so the front-end script for login can simulate the real-life login of different users
- Analyzed data from the current production servers to determine the metrics to load test
- Created API Scripts using Postman and JMeter that use token access authentication
- Executed load test with 1000 users using Blazemeter and analyzed the data using 5 different scripts

Tools: SQL Server, Jmeter, Blazemeter, Git, Postman

Software Development Co-op - Cranberry Township, PA MSA Safety   **01/2019 to 08/2019**
Tasked with communicating with a gas detector using a phone. Connected to a gas detector with an android device using Bluetooth Low Energy.
- Designed and developed an Android app that supports Bluetooth low energy using Xamarin/C# and Visual Studio that successfully communicates with a next-generation gas detector
- Tested the speed of transferring data between two Bluetooth Low Energy devices that are breaking the Bluetooth low energy 23-byte limit using debugging and a Bluetooth sniffer using two Android phones.
- Planned and Developed a Xamarin Forms app for iOS and Android that scans and reads NFC tags and displays the message on the tags
- Created a Xamarin Forms App for iOS and Android that does Speech to Text to test for a future generation product using native Xamarin Android and iOS
- Created 4 different apps between Android and iOS

Tools: C#, Visual Studio, Xamarin, Xamarin Forms, Android development, iOS development

Capacity Checker - Engineering Cloud-Based Software System   **01/2021 to 05/2021**
Created a Cloud-based application that monitors room capacity using machine learning to help enforce COVID19 room capacity guidelines. A Video/Camera is streamed to the Cloud-based application and Capacity is displayed on a Front-end
- Automated spinning up and tearing down the cloud application using AWS CDK with Python
- Deployed and setup AWS relational database and PostgreSQL
- Created Lambda Functions to process data from the database and send notifications
- Set up AWS API Gateway to get data from Lambda to React frontend.
- Deployed React Front end to AWS Amplify using Github

Tools: React, Python, AWS, PostgreSQL, Git, Visual Studio Code, AWS CDK tool kit, Boto3

HRV-BioFeedback - Senior Project   **01/2020 to 08/2020**
Tasked with finding how to read Heart Rate Biofeedback without needing to go for a clinical visit or using an expensive heart rate device from a sponsor. Creating an Android and iOS app that will administer Heart Rate BioFeedback using a polar h10 heart rate device using Bluetooth.
- Created a domain model based on meetings with the sponsor and current code
- Refactored current android source code to scan for all Bluetooth devices
- Refactored current android source code to convert Firebase to AWS
- Created Lambda functions to read Heart Rate and Demographic data in JSON to Dynamodb
- Implemented a user account system for application and linked to AWS Cognito

Tools: Android Studio, Java, UML diagrams, Git, AWS, AWS Dynamodb, Scrum, AWS Lambda, AWS Cognito