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## **Experience**

Microsoft Redmond, WA

SOFTWARE ENGINEER | AZURE VIRTUAL NETWORKING

Aug 2020 - Present

- Work on major rewrite of the core system running on millions of servers that programs the networking info for every Azure VM, reducing average VM creation time by over 25%.
- Added support in the rewrite for Azure route tables, VPN gateways, virtual network service endpoints, application security groups, and accelerated networking using C++ and a publish-subscribe data model to get networking data stored as Protobufs.
- Designed and implemented support for accessing Azure Private Endpoints from on-premises networks through Azure ExpressRoute FastPath using .NET microservices running on Azure Service Fabric.
- · Drove adoption of modern C++ practices in the codebase, reducing memory leaks and program execution time.

Amazon New York, NY

SOFTWARE DEVELOPMENT ENGINEER INTERN | AMAZON DEMAND SIDE PLATFORM

Jun 2019 - Aug 2019

- Designed a scheduling system to manage the number of tests running concurrently across the team's unit test suites.
- Developed the system using Java and DynamoDB to handle test runs in different queues based on accessed resources.
- Wrote UI integration tests for the Amazon DSP Console using Selenium in Java.
- Created visualization of current running tests using AWS DynamoDB Streams, Lambda, and S3.

Amazon East Palo Alto, CA

SOFTWARE DEVELOPMENT ENGINEER INTERN | AWS DATABASE MIGRATION SERVICE

Jun 2018 - Aug 2018

- Created an end to end notifications system to inform customers, improving time it takes to notify them from days to minutes (over 57,000% faster).
- · Added ability for employees to create/update notifications using a Ruby on Rails front end and a Spring and Oracle DB back end.
- · Developed an interface on the AWS DMS Console for users to read their notifications using React and TypeScript.
- Gained familiarity in using various AWS services, including S3, EC2, and Lambda.

### Skills

**Programming Languages** Java, Python, JavaScript, C++, C#, TypeScript

Technologies AWS, GCP, Azure, Node.js, React, Express, Flask, .NET, Mypy, PostgreSQL, Jest, Pytest, TestNG, JUnit, Chai, Mocha

Natural Languages Fluent: English, Telugu; Intermediate: Japanese

# **Projects**

**DoctorSearch** gitlab.com/krysehun/doctorsearch

 $Python, Flask, Postgre SQL, Postman, AWS\ EB, AWS\ RDS, Node. \\ Js, React, Material\ UI, Chai, Mocha, Pytest$ 

Oct 2019 - Dec 2019

- · Created a web app that provides information about doctors and specialties in 50 major cities using React and JavaScript.
- Developed a RESTful API in Python and Flask that supports filtering, sorting, and searching doctors, specialties, and cities, hosted on AWS.
- Tested the frontend using Chai and Mocha and the backend using Pytest.

**JikanPy** pypi.org/project/jikanpy

Python, Requests, AioHTTP, Mypy, Pytest, VCR.py

Apr 2018 - Present

- Created a Python wrapper library for the MyAnimeList unofficial Jikan API supporting both synchronous and asynchronous usage.
- · Added static typing using mypy and unit tested with Pytest and VCR.py for 100% coverage utilizing Travis CI.

## Education

**B.S. IN COMPUTER SCIENCE** 

#### The University of Texas at Austin

Austin, TX

Aug 2017 - May 2020

• University Honors, President's Horizon Scholarship, GPA: 3.86