

# Abhinav Kasamsetty

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## Experience

### Microsoft

Redmond, WA

SOFTWARE ENGINEER II | AZURE VIRTUAL NETWORKING

Aug 2021 - Present

SOFTWARE ENGINEER | AZURE VIRTUAL NETWORKING

Aug 2020 - Aug 2021

- 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 C# .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

### JikanPy

[pypi.org/project/jikanpy](https://pypi.org/project/jikanpy)

PYTHON, REQUESTS, AIOHTTP, MYPY, PYTEST, VCR.PY

Apr 2018 - Present

- Created a Python library for the MyAnimeList unofficial Jikan API supporting both sync and async usage that has over 4 million monthly downloads.
- Added static typing using mypy and unit tested with Pytest and VCR.py for 100% coverage utilizing Travis CI.

### DoctorSearch

[gitlab.com/krysehun/doctorsearch](https://gitlab.com/krysehun/doctorsearch)

PYTHON, FLASK, POSTGRESQL, 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.

## Education

### The University of Texas at Austin

Austin, TX

B.S. IN COMPUTER SCIENCE

May 2020

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