Rachel Sheikh

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About Me_____

Open Source Contributor/Developer	Orwell • Helios • Lapdog • Movienight • Spelunker
Education	Old Dominion University: 2020 - B.S., Psychology George Mason University: 2017 - B.S., Computer Science

Professional Experience_____

Twitter   **San Francisco, CA**
Software Engineer II: Live Services   Jan 2021 - Present
- Contributing to a variety of audio and video live streaming services on the Twitter platform, built in Go and Scala

State Farm   **Palo Alto, CA**
Lead Software Engineer: Sundial Labs Independence   Jun 2020 - Jan 2021
- Serving as engineering lead across all 4 engineering teams
- Integrating a product-wide GraphQL aggregation layer built in Go to optimise client side runtimes
- Scaling up core APIs by converting them over from Node.js to Go in order to reduce cost within AWS
- Spearheading standards for feature design and infrastructure documentation across all teams
- Rearchitechting product in favour of a multi-region, fault tolerant serverless application on AWS
- Developing custom metrics within AWS Cloudwatch to generate insights into how users interact with Sundial

Volkswagen Credit, Inc.   **Herndon, VA**
Lead Software Engineer (Covid-19 Layoff): Innovation Labs   Sep 2019 - Apr 2020
Software Engineer: Innovation Labs   Feb 2019 - Sep 2019
- Led technology discussions within the lab and with communications with external partners
- Established a state rebuild mechanism through implementing an Event Sourcing architecture built in Kafka
- Developed a GraphQL aggregation layer for use in VW's e-commerce reservation platform
- Mentored engineering interns through a computer vision project in PyTorch to analyse vehicle images for damage
- Built an Alexa skill MVP that enables users to sign in and check payment statuses via voice with Python
- Built a prototype data analytics/simulation platform for dealerships nationwide with Python and React
- Assisted with user interviews and user testing to enable informed decision-making on projects within the lab
- Gave tech talks on developing with blockchain and machine learning to VW engineers around the world

Discovery Communications, Inc.   **Silver Springs, MD**
Senior Software Engineer (Contract): Media Infrastructure   Nov 2018 - Jan 2019
- Developed a streamlined data validation pipeline for analysing Discovery's video metadata with Python
- Worked with AWS Elemental Live APIs to create a client-facing user interface for media delivery with Python
- Implemented authentication functionality for internal media delivery applications using Okta, Angular 2, and Node

Sequoia Holdings, Inc.   **Reston, VA**
Lead Software Engineer (Company layoff): Blockchain   May 2018 - Jul 2018
- Translated product codebase to Python in order to streamline development on a blockchain MVP
- Delivered company-wide tech talks on blockchain development and design

Microsoft   **Washington, D.C.**
Lead Software Engineer (Contract): Microsoft Azure Blockchain & ML   Mar 2018 - Apr 2018

- Led architectural design and development for retail blockchain MVP built with React/Node.js
- Led development of pdf classification model within Azure ML team for creating a query portal

Telos Corporation   **Ashburn, VA**
Software Engineer: Innovation Lab   Aug 2017 - Mar 2018

Intern Software Engineer: Innovation Lab   May 2017 - Aug 2017
- Utilized the Electron framework to build out a desktop blockchain application to track sensitive assets
- Worked with the backend team to configure Hyperledger Composer and build out REST APIs with Flask
- Spearheaded research efforts into blockchain technology and available frameworks to guide project decisioning

Additional Projects_____

Orwell
Rapid project and environment creation CLI built to automatically generate directory structures, README files, Travis-CI, git hooks, and other necessary files in order to enable immediate development. Continuing to increase language coverage and support for developer-enabled config files within their codebases. Also integrating additional functionality through Hummingbird and Spelunker. Built with Go.

Helios
Dependency validation tool built to ingest a hosted project configuration file with sockets and check the current status of yaml-based codebase configuration files to maintain consistency across a distributed development landscape . Built with Python.

Lapdog
Slack bot built to handle several slash commands surrounding issue generation and consumption. Integrates with SQS and S3 via Boto3, with moto-based test mocking, and a simple Flask application that contains templated variables for AWS credentials. Built with Python.

Movienight
Media streaming server that utilises FFmpeg to mass-encode a directory of .mp4 video files over to HLS compatible streams that are served through an HTTP server. Built with Go.

Spelunker
Automated mocking generation tool that ingests and parses through a codebase in order to create relevant test files and a test directory if one does not currently exist. Continuing to increase language coverage, library coverage, and add additional functionality before integrating into Coldstart. Built with Python.