

## About Me

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<b>Programming Languages</b>	C++ • Go • Javascript(ES6) • Python 3 • SQL
<b>Frameworks/Libraries/Tools</b>	Angular • AWS • Azure • Docker • Flask • GCP • GraphQL • Kafka Kubernetes • MongoDB • OpenCV • Pytorch • React • Tensorflow
<b>Education</b>	George Mason University: Fall 2017 - B.S., Computer Science

## Professional Experience

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### Volkswagen Group of America

Lead Research Software Engineer - VCI Innovation Labs

**Herndon, VA**

Feb 2019 - Present

- Designing and scoping out prototypes for future development within the Innovation Labs
- Leading research efforts into future innovative technologies, such as deep learning and quantum computing
- Managing engineering component of Innovation Labs and mentoring junior engineers through projects
- Leading Summer 2019 interns through innovative machine learning projects to build out computer vision models and improve algorithmic design
- Designing and leading software engineering interviews in order to further build out innovation engineering team
- Architecting and developing a future mobility platform utilising blockchain and ML in React/Django/GraphQL
- Delivering lunch-and-learn sessions to educate and train employees to use innovative technologies

### Discovery Communications, Inc.

Software Engineer

**Silver Springs, MD**

(Contract Position) Nov 2018 - Jan 2019

- Designed and developed a media data pipeline for validating video metadata using Python
- Implemented proprietary authentication functionality for internal media delivery applications using Angular 2
- Worked with AWS Elemental Live APIs to create a client-facing user interface for media delivery with Python
- Completed GCP Developer and AWS certification course

### Sequoia Holdings, Inc.

Back-end Software Engineer

**Reston, VA**

(Laid Off: Budget Cuts) May 2018 - Jul 2018

- Provided business leaders with subject matter expertise on blockchain technology
- Developed a decentralized blockchain network for enterprise using Python/Flask
- Delivered company-wide learning sessions to train employees on distributed ledger and blockchain technologies

### Microsoft

Blockchain & AI Lead

**Washington, D.C.**

(Contract Position) Mar 2018 - Apr 2018

- Developed a cross-platform (mobile and web) blockchain platform with React and React Native
- Managed engineering team and brought subject matter expertise to guide business decisions
- Utilised Azure Machine Learning to create a query portal for categorising legal documents with reinforcement learning

### Telos Corporation

Research Software Engineer - Innovation Team

**Ashburn, VA**

May 2017 - Mar 2018

- Utilized Github's Electron framework to build out a cross-platform dashboard UI for a desktop blockchain application
- Worked with the backend team to configure Hyperledger Composer and build REST APIs for productization
- Spearheaded research efforts into blockchain technology to guide project decisioning

**Old Dominion University**  
IT Tech Lead

**Norfolk, VA**  
Oct 2015 - May 2016

- Guided junior members through data-sensitive projects and assisted with training/management
- Managed user database using SQL and utilised data to ensure productive downtime behind the desk

## Publications

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- **Development and Validation of a Deep Learning Algorithm for Early Detection of Alzheimer's Disease in Genetic Data.** In-progress: 2019

- **A Backpropagation Algorithm for Performance Improvements Within Distributed Neural Networks.** In-progress: 2019

## Freelance Experience

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**Soko**  
Lead Mobile Engineer

**Washington, DC**  
Jul 2018 - Dec 2018

- Utilising Flutter and Dart to design and develop an application that connects consumers to locally owned businesses
- Deploying mobile applications to App Store and Google Play

**Public Bloc**  
Chief Technology Officer

**Washington, DC**  
Oct 2017 - Feb 2018

- Hired engineering team and led coding sprints
- Developed and deployed company website
- Identified and tracked success/tracking metrics to enable growth of the start-up / platform

**DrillBook**  
Software Engineer

**Ashburn, VA**  
Apr 2017 - Feb 2018

- Ported over Java Swing Front-End UI to Github's Electron in order to increase user retention
- Developed product website using HTML/CSS/jQuery to increase monetisation for company

**Ashtech**  
Software Engineer

**Ashburn, VA**  
Apr 2015 - Feb 2017

- Developed microservices using Go for controlling hardware inputs
- Developed Arduino programs to control micro-computer

**Techtagon**  
Technical Writer / Editor

**Ashburn, VA**  
Jul 2014 - Oct 2015

- Oversaw development and growth of small-scale, technology-oriented website
- Edited and cultivated content for writers on the team

## Awards

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**DevFest Hackathon First Place - Chord**

- Won first place during Google Firebase Hackathon with a real-time audio commenting tool for musicians utilising Google Firebase and Javascript