# **DAVID ZHAO**

#### SOFTWARE ENGINEER

Looking to challenge the status quo with impactful and innovative software

#### LEARN University of Virginia, Charlottesville, VA

Aug 2016-May 2019

B.S., Computer Science (GPA 4.0) and Statistics (GPA 4.0) double major, Overall GPA-3.9 Relevant Coursework: Text Mining, Machine Learning, Computer Vision, Algorithms, Computer Architecture, Theory of Computation, Regression Analysis, Math Statistics, Linear Algebra, Probability, Discrete Math, Multivariable Calculus

Thomas Jefferson HSST, Alexandria, VA-Web/Mobile App Development Senior Lab

Sep 2012-Jun 2016

### WORK Palantir Technologies, Forward Deployed Software Engineer Intern

May 2018-Present

Building data integration pipelines and new R flavor Spark support to double users at financial reg. agency

Python, R

Octo Consulting Group, Associate Consultant/Intern

Nov 2017-Apr 2018

Led development of chatbot generator pipeline with aims to reduce govt expenses

AWS, Python

**Innovative Defense Technologies,** Software Engineer Intern

May 2017-Aug 2017

Architected a secure chat plugin in a pre-existing web app for a better user experience Wrote automated unit tests, learned BackboneJS, coded REST backends, wrote build scripts

Typescript (TS), JS, Java TS, JS, Java, Bash

**US Army Corps of Engineers,** Research Scientist Intern

Jun 2015-Aug 2015

Researched algorithms to reduce setup & querying computations of K-nearest neighbors for a spatial index

Python

BUILD **BusMan** June 2018–Present

Engineering system to provide students with school bus after-school parking info to improve safety

Django, Vue

K-Armed Bandit Notebook

June 2018

Explored different approaches to the k-armed bandit problem in reinforcement learning

Python

What's Open @ UVA

Feb 2018-Mar 2018 JS. PHP

 $\label{lem:compiled} \textbf{Compiled hours of libraries, restaurants, and other institutions around UVA grounds}$ 

Built Chrome extension to search videos by what actually appears in the video

Jan 2018

Scout, HoyaHacks

**Image to Crime** 

.IS

Developed the AWS backend, included Lambda, Rekognition, EC2, Systems Manager, API Gateway

Python, AWS

Question-Answering Bot Generator from Website FAQs, RamHacks

Sep 2017

Coded a web scraper with ML to automatically generate a chat bot from website FAQs  $\,$ 

Python, Java

Analyzed the relationship between satellite imagery and crime rates in Chicago

Python

## LEAD Hackers@UVA, Co-President, Treasurer, Organizer, Mentor, Participant

Mar 2014-Present

Sep 2017-Nov 2017

Spearheading effort to massively increase hacker culture at UVA by providing students opportunities to learn and build, Raised and managed \$80k funds for Hack.UVA '18, boosted attendance by 1.75x from 200 to 550 students, organized caterers Participated in 10 hackathons (won at 1), mentored 2 middle school hackathons

Java, JS, Node, PHP

#### Cavalier Symphony Orchestra, Chief Technology Officer

Sep 2016-Present

Developing and maintaining website to streamline technology use within the club

JS, PHP

CS 1501 Engineering Web Solutions, Student Lecturer

Jan 2018-May 2018

Taught a class of 15 college students web app development and design thinking principles

February 2017-May 2017

Natural Language Processing (NLP) Research Group

Explored NLP and deep learning which entailed weekly meetings discussing current research

NumPY, Tensorflow

Languages — proficient: Python, Javascript, Java, HTML, CSS, competent: C++, R, SAS, Typescript, PHP, Bash Libraries and Tools — proficient: Git, AWS, JQuery, NumPY, competent: Linux, Android Studio, Selenium

USE