

DAVID ZHAO

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SOFTWARE ENGINEER

☎ (281) 961-7541

Using computer science to solve the most challenge problems and make the world a better place

EDUCATION **University of Virginia**, Charlottesville, VA

Aug 2016 - May 2020

B.S. Computer Science with planned second in Statistics, Overall GPA - 3.90, Major GPA - 4.00

Fall '17 : Machine Learning, Computer Architecture, Theory of Computation, Regression Analysis, Math Statistics

Spring '17 : Program & Data Rep., Linear Algebra, Probability, Discrete Math

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

Sep 2012 - Jun 2016

Artificial Intelligence, Web/Mobile App Development, AP Computer Science (5), AP Statistics (5)

WORK

Innovative Defense Technologies, Arlington, VA - *Software Engineer Intern*

May 2017 - Present

Developed a socket-based chat plugin from scratch as internal & maintainable alternative Typescript, JS, Java, Postgres

Learned BackboneJS & UnderscoreJS, coded REST backends, wrote make/build scripts Typescript, JS, Java, Bash

US Army Corps of Engineers, Alexandria, VA - *Research Scientist Intern*

Jun 2015 - Aug 2015

Developed algorithms to reduce setup and querying computations of a K-nearest neighbors on a spatial index Python

TJ Middle School Tech Institute, Fairfax, VA - *Teaching Assistant*

Sep 2014 - Jun 2014

Taught 120 middle school students basic app development in workshop and one-on-one settings App Inventor

Math Tutor, Alexandria, VA - *Volunteer/Tutor*

Feb 2013 - Jun 2016

Tutored dozens of at-risk middle school students and two high school students on math topics

PROJECTS

Natural Language Processing Research Group

February 2017 - Present

Exploring NLP and deep learning which entailed weekly meetings discussing current research Python

Taking online courses in Machine Learning and trying different python libraries NumPY, Theano, Tensorflow

Hackathons, *Treasurer, Organizer, Mentor, Participant*

Mar 2014 - Present

Organized HackUVA '17, treasurer for HackUVA '18, personally contacted 65+ sponsors and organized all caterers

Participated in 8 hackathons with more to come, mentored 2 middle school hackathons Java, JS, Node, PHP

Basic Recurrent Neural Network

Jul 2017

Created a recurrent neural network that generates text in the prose of the training text Python

Personal Web Page

Jan 2016 - Present

Created an aesthetic resume and daily programming journal website, link at bottom JS

Neural Network in Google Sheets

Jul 2017

Implemented and trained a neural network with programmable hyperparameters in Google Sheets

Cavalier Symphony Orchestra, *Chief Technology Officer, Principal Trumpet*

Sep 2016 - Present

Developing website and streamlining technology and communication within the club JS

Anacostia National Park App

Jul 2015 - Jul 2016

Created a geo-narrative audio tour guide app in coordination with an Anacostia National Park representative Java

Rubik's Cube Club, *Developer/Co-President*

Nov 2015 - Jun 2016

Elected co-president to develop high school's Rubik's Cube club website and manage communications JS, PHP

SKILLS

Programming Languages

Python - Javascript - C++ - Java - Typescript - Bash - PHP - C# - HTML - CSS

Software and Tools

Git Bash - Linux - Selenium - VS Code - Powershell - Android Studio - GIMP - Blender - Unity 3D

GITHUB

www.github.com/davidbzhao

LINKEDIN

www.linkedin.com/in/davidbzhao

WEBSITE

davidzhao.me

More information @ davidzhao.me/Resume