

DAVID ZHAO

SOFTWARE ENGINEER

Looking to challenge the status quo with impactful and innovative software

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EDUCATION	University of Virginia , Charlottesville, VA	Aug 2016 - May 2020
	Double major B.S. Computer Science and Statistics, Overall GPA - 3.90, Major GPA - 4.00	
	Current: Machine Learning, Computer Architecture, Theory of Computation, Regression Analysis, Math Statistics	
	Program & Data Rep., Linear Algebra, Probability, Discrete Math, Multivariable Calculus	
	Thomas Jefferson HSST , Alexandria, VA - <i>Web/Mobile App Development Senior Lab</i>	Sep 2012 - Jun 2016
WORK	Octo Consulting Group , <i>Associate Consultant/Intern</i>	Nov 2017 - Present
	Continuing part-time development on FaqToBot project developed at RamHacks	Python
	Innovative Defense Technologies , <i>Software Engineer Intern</i>	May 2017 - Aug 2017
	Developed a socket-based chat plugin from scratch as internal & maintainable alternative	Typescript, JS, Java
	Wrote automated unit tests, learned BackboneJS, coded REST backends, wrote build scripts	Typescript, JS, Java, Bash
	US Army Corps of Engineers , <i>Research Scientist Intern</i>	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 , <i>Teaching Assistant</i>	Jul 2014 - Aug 2014
	Taught 120 middle school students basic app development in workshop and one-on-one settings	
ACTIVITIES	HackUVA , <i>Treasurer, Organizer, Mentor, Participant</i>	Mar 2014 - Present
	Treasurer for HackUVA '18. Organized HackUVA '17 personally contacted 65+ sponsors and arranged all caterers	
	Participated in 9 hackathons (won at 1), mentored 2 middle school hackathons	Java, JS, Node, PHP
	Cavalier Symphony Orchestra , <i>Chief Technology Officer</i>	Sep 2016 - Present
	Developed website using various javascript libraries and streamlined technology within the club	JS, PHP
	Natural Language Processing (NLP) Research Group	February 2017 - May 2017
	Explored NLP and deep learning which entailed weekly meetings discussing current research	
	Took online courses in Machine Learning and tried different python libraries	NumPY, Tensorflow
PROJECTS	Question-Answering Bot Generator from Website FAQs, RamHacks	Sep 2017 - Present
	Coded a web scraper with a neural network and an Android app leveraging Microsoft Cognitive Services	Python, Java
	to generate a chatbot generator for website FAQs, placed 1st in MLH's Best AWS use and Octo's FAQ bot challenges	
	Image to Crime	Sep 2017 - Present
	Developing a program to test if an image can predict crime rates in the area	Python
	Basic Recurrent Neural Network	Jul 2017
	Created a recurrent neural network that generates text in the prose of the training text	Python, Theano
	Facebook Messenger Chat Bot Framework, MLH Prime Spring	Jul 2016
	Programmed a chatbot framework for other developers on top of the existing messenger framework	Node
	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
SKILLS	Languages — Python (3yrs), Javascript (8yrs), Java (4yrs), C++ (1yr), HTML, CSS, Typescript, Bash, PHP	
	Libraries — JQuery, NumPY, Bootstrap, Underscore, Backbone	
	Software and Tools — Git Bash, AWS, Selenium, VS Code, Linux, Powershell, Android Studio, Unity 3D	