

# Joshua Geden

joshua.geden@duke.edu | linkedin.com/in/joshua-geden | github.com/Josh0823 | joshgeden.gatsbyjs.io

Experience	<b>Software Engineer Intern</b> Berkeley National Lab, National Energy Research Scientific Computing Center <ul style="list-style-type: none"><li>Developing software with React and Python to extend Jupyter notebook</li><li>Exposing NERSC's HPC and storage systems to Jupyter</li><li>Making supercomputing more literate and user friendly</li></ul>	May 2021 - Aug. 2021
	<b>Teaching Assistant</b> Duke University, Computer Science Department <ul style="list-style-type: none"><li>CS230, Discrete Math for Computer Science, Jan 2021 - present<ul style="list-style-type: none"><li>Taught topics including proofs &amp; logic, set theory, induction, probability, and graph theory</li></ul></li><li>CS201, Data Structures &amp; Algorithms, Jan 2020 - Nov. 2020<ul style="list-style-type: none"><li>Taught topics including arrays, linked-lists, maps, trees, queues, stacks, and time &amp; space complexity analysis</li></ul></li></ul>	Jan. 2020 - May 2021
	<b>Research Intern</b> Furman University, Biology Department, Haney Lab <ul style="list-style-type: none"><li>Designed methodology; collected and analyzed field data</li><li>Presented research poster at two academic conferences</li></ul>	June 2018 - July 2018
Education	<b>Duke University</b> , B.S., Computer Science & Linguistics Current GPA: 3.98/4.0 Activities: International Collegiate Programming Competition Club, researching applications of NLP & ML to combat vaccine misinformation with Yang Lab	Aug. 2019 - May 2023
	<b>S.C. Governor's School for Science &amp; Mathematics</b> Graduating Unweighted GPA: 4.0, Weighted GPA: 5.204 Activities: Robotics Team Captain, Computer Science Tutor, Captain of Mock Trial Club, President of Youth in Government Club	Aug. 2017 - May 2019
Honors and Awards	<b>Dean's List</b> , Duke University <b>First Prize, Environmental Science Research</b> , S.C. Junior Academy of Science <b>National Merit Scholarship Finalist</b> <b>U.S. Presidential Scholars Candidate</b> <b>Dean's List</b> , Coker University	Fall 2019 March 2019 Spring 2019 Spring 2019 Fall 2018
Projects	<b>Duke Pet Tracker Web Application</b> <ul style="list-style-type: none"><li>Developed a full-stack, multi-user, location-based image sharing web application</li><li>Technologies used: Vue, Express, Google Firebase, Google Passport OAuth</li></ul> <b>RISC Processor</b> <ul style="list-style-type: none"><li>Designed a 16-bit MIPS-like word addressed RISC architecture</li><li>Implemented design in Logisim and tested using MIPS-like assembly files</li></ul> <b>Huffman File Compressor</b> <ul style="list-style-type: none"><li>Used BinaryTrees and PriorityQueues to implement Huffman encoding algorithm</li><li>Achieved average compression rate of 40%</li></ul> <b>SimplyFrank Simulated Compiler and Assembler</b> <ul style="list-style-type: none"><li>Created a BASIC-like programming language named SimplyFrank</li><li>Implemented a compiler in C++ to compile SimplyFrank code into simulated assembly code</li></ul> <b>FIRST Robotics OnBot Java Control System</b> <ul style="list-style-type: none"><li>Developed autonomous &amp; driver-operated robot control systems in Java</li><li>Controlled robot at regional competition for team and came in 2nd place</li></ul>	
Skills	Java, Python (sklearn, Selenium, Tornado), C++, Javascript (Vue, React, Express, Node), R (dplyr & ggplot) Familiar with Git, Linux, and Docker development environments Coursework in Data Structures, Computer Architecture, Web Applications, & Data Visualization	