

Education	University of Missouri - Columbia	July 2021
	<b>Ph.D. Computer Science</b>	
	Missouri University of Science and Technology	May 2019
	<b>M.S. Computer Science</b>	
	<b>B.S. Computer Science</b>	
	<b>Minor: Computer Engineering &amp; Mathematics</b>	
Work Experience	Sandia National Laboratories	Albuquerque, NM
	<b>Senior Computer Scientist</b>	July 2021 - Present
	<ul style="list-style-type: none"><li>Supported the development and analysis of wide-view visual-based satellite remote sensing sensors</li><li>Designed a graph neural network architecture for event classification using PyTorch</li><li>Lead a team of engineers working on analyzing remote sensing data</li><li>Spearheaded a project converting image segmentation maps into realistic images using a generative adversarial neural network</li><li>Proposed and received funding for machine learning and data science projects</li><li>Mentored Ph.D. and undergraduate interns in software development</li></ul>	
	<b>Cybersecurity Intern</b>	May 2017 - Dec 2019
	<ul style="list-style-type: none"><li>Applied machine learning to find correlations between source code and binary</li><li>Wrote emulotics software using C for the 1553 data bus protocol</li><li>Created a Laika BOSS module to filter out metadata</li><li>Designed and implemented a graph labeling attack algorithm</li><li>Developed Python libraries in C++ for more efficient software</li><li>Analyzed network data using Bro and machine learning</li></ul>	
	Missouri University of Science and Technology	Rolla, MO
	<b>Graduate Teaching Assistant</b>	Fall 2019
	<ul style="list-style-type: none"><li>Instructed students on objected-oriented programming (C++)</li><li>Prepared lesson plans that are both informative and engaging to students</li><li>Enforced the high integrity standards outlined by the university</li></ul>	
	Cerner	Kansas City, MO
	<b>Software Engineering Intern</b>	Summer 2016
	<ul style="list-style-type: none"><li>Created a Ruby On Rails web application with added security features</li><li>Developed or used existing APIs for tools like Jenkins and Crucible</li><li>Led a team of interns in weekly live demos to management</li><li>Won crowd favorite at the intern hackathon</li></ul>	
Additional Experience	<b>Personal Website</b>	July 2020 - Present
	<ul style="list-style-type: none"><li>Implemented a personal website using Django</li><li>Managed a PostgreSQL database</li><li>Extensively used Django templates to promote concise and rapid development</li><li>Created a mobile-first responsive website design using bootstrap</li><li>Containerized website deployment via Docker</li><li>Used TravisCI and Github Actions to automate unit testing and deployment</li><li>Incorporated Google Search for quick and efficient website queries</li></ul>	
	<b>Programming Competitions</b>	Fall 2015 - 2019
	<ul style="list-style-type: none"><li>Won MS&amp;T's Programming Cup - Individual's Bracket</li><li>ACM ICPC Regional's first place on-site</li></ul>	
Publication	<ul style="list-style-type: none"><li><b>D Cole</b>, S Newman, D Lin. <i>"A New Facial Authentication Pitfall and Remedy in Web Services"</i>. IEEE Transactions on Dependable and Secure Computing, vol. 19, no. 4, pp. 2635-2647, 1 July-Aug. 2022</li></ul>	
Computer Skills	Advanced: Python C++ Rust Proficient: Java JavaScript HTML Linux LaTeX SQL Django PyTorch Tensorflow Keras Docker Matplotlib Numpy Sklearn	