

# Chandler L. Cain

chandler@clcain.com

<b>EDUCATION</b>	<b>M.S. Computer Engineering</b> , Virginia Tech Graduating Fall 2020 (GPA: 3.77)	<b>B.S. Computer Engineering</b> , Virginia Tech (2018) (minor in Computer Science)
<b>SKILLS</b>	<b>Specializations:</b> Cybersecurity, Linux/Unix, Cloud Architecture, TCP/IP networking, Web APIs, Distributed Systems, Amazon Web Services, DevOps, Agile Software Development <b>Programming Languages:</b> Python, C/C++, Java, Bash, Ruby, JavaScript/TypeScript, HTML/CSS	
<b>PROFESSIONAL EXPERIENCE</b>	<b>Graduate Research Assistant at Virginia Tech</b> (Fall 2018 – Summer 2020) <ul style="list-style-type: none"><li>Performed research in isolating code execution on a public cloud platform using Intel SGX</li><li>Published cloud security overview paper at IEEE SoutheastCon 2020</li></ul> <b>Enterprise Forensics DevOps Engineering Intern at FireEye</b> (Summer 2019) <ul style="list-style-type: none"><li>Designed automation tools to assist the deployment of network packet analysis software</li><li>Developed a Ruby on Rails plugin for the Foreman automation platform to allow dynamic provisioning of virtual machines on VMWare vCloud Director infrastructure</li></ul> <b>Cloud Architecture Engineering Intern at Virginia Cyber Range</b> (Fall 2017 – Summer 2018) <ul style="list-style-type: none"><li>Enhanced the state of cybersecurity education by developing a safe, online platform for students to practice offensive and defensive computer and network security</li><li>Developed automation tools for cloud resources using Ansible and GitLab CI/CD pipelines</li><li>Analyzed system usage by designing data collection utilities using Python and Grafana</li></ul> <b>Web Applications Engineering Intern at FTS International</b> (Summer 2017) <ul style="list-style-type: none"><li>Architected a satellite data visualization system to be deployed on AWS</li><li>Designed and implemented an HTTP API for data storage using Python/Flask and MongoDB</li><li>Created a web application for data visualization using HTML, JavaScript, D3.js and Cesium</li></ul> <b>Software Development Intern at Rackspace</b> (Summer 2016) <ul style="list-style-type: none"><li>Improved spam classification accuracy on the Rackspace Email platform</li><li>Developed Python software to run in a distributed system to process emails using Redis caching, RabbitMQ message queuing, and MongoDB data storage</li></ul>	
<b>PROJECTS</b>	<b>Lead Developer, Virginia Open Course Platform</b> (2019 – Present) <ul style="list-style-type: none"><li>Supported education in the state of Virginia by developing an online platform and provisioning services to allow student use of remote desktop environments hosted on AWS</li></ul> <b>Director, VTHacks</b> (2017 – 2018, committee member 2015 – 2017) <ul style="list-style-type: none"><li>Planned event logistics, coordinated with sponsors, and designed workshops to support the annual hackathon at Virginia Tech</li></ul> <b>Executive Committee Member, Virginia Tech AMP Lab</b> (2017 – 2018, participant 2014 – 2018) <ul style="list-style-type: none"><li>Initiated a team project to develop a modular, open source, and secure platform for home automation and IoT devices</li></ul> <b>IT Manager, Virginia Tech Secure Embedded Systems Lab</b> (Spring 2017) <ul style="list-style-type: none"><li>Supported FPGA analysis software, created documentation on GitHub Wikis, and organized a system for secure remote administration of lab machines</li></ul>	
<b>HONORS &amp; ACTIVITIES</b>	RSA Conference Security Scholar (2019) Virginia Cybersecurity Education Conference Staff (2018) Facebook/CodePath.org Cybersecurity Course Graduate (2018) Virginia Tech Linux and Unix User's Group (2017 – Present, VP 2019 – Present) Virginia Tech Cybersecurity Club (2016 – Present) Virginia Tech Student Chapter IEEE (2015 – Present) Virginia Tech Computer Science Community Service Club (2015 – 2016)	