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# Chandler L. Cain

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**EDUCATION**      **M.S. Computer Engineering**, Virginia Tech      **B.S. Computer Engineering**, Virginia Tech  
Expected graduation: May 2020 (GPA: 3.68)      (2018) with a minor in Computer Science

**SKILLS**      **Specializations:** Cybersecurity, Linux/Unix, Cloud Architecture, TCP/IP networking  
Web APIs, Distributed Systems, Amazon Web Services, DevOps, Agile Software Development  
**Programming Languages:** Python, JavaScript, Java, C/C++, Bash, Ruby, HTML/CSS

**PROFESSIONAL EXPERIENCE**

**Enterprise Forensics DevOps Engineering Intern at FireEye** (Summer 2019)

- Designed automation tools to assist the deployment of network analysis software
- Developed a Ruby on Rails plugin for Foreman to facilitate vCloud Director

**Graduate Research Assistant at Virginia Tech** (Fall 2018 – Present)

- Performed research on cloud application security, mesh networks, and authentication
- Continued to support the development of the Virginia Cyber Range

**Cloud Architecture Engineering Intern at Virginia Cyber Range** (Fall 2017 – Summer 2018)

- Enhanced the state of cybersecurity education by developing a safe platform for practicing offensive and defensive computer and network security
- Developed automation tools for cloud resources using Ansible and GitLab CI/CD pipelines
- Analyzed system usage by designing data collection utilities using Python and Grafana

**Web Applications Engineering Intern at FTS International** (Summer 2017)

- Architected a satellite data visualization system to be deployed on Amazon AWS
- Designed and implemented an HTTP API for data storage using Python/Flask and MongoDB
- Created a web application for data visualization using HTML, JavaScript, D3.js and Cesium

**Software Development Intern at Rackspace** (Summer 2016)

- Improved spam classification accuracy on the Rackspace Email platform
- Developed Python software to run in a distributed system using Python, Redis, RabbitMQ, and MongoDB

**PROJECTS**

**Lead Developer, Virginia Open Course Platform** (Spring 2019 – Present)

- Developed a platform to allow the use of cloud resources in education

**Director, VTHacks** (2017 – 2018, committee member 2015 – 2017)

- Planned event logistics and coordinated with sponsors to support the annual hackathon at Virginia Tech

**Virginia Tech AMP Lab Member** (2014 – 2018, executive committee 2017 – 2018)

- Initiated a team project to develop a modular and open source platform for home automation and IoT devices

**Virginia Tech Secure Embedded Systems Lab IT Manager** (Spring 2017)

- Supported FPGA analysis software, created documentation on GitHub Wikis, and organized a system for secure remote administration of lab machines

**HONORS & ACTIVITIES**

RSA Conference Security Scholar (2019)  
Virginia Cybersecurity Education Conference (2018)  
Facebook/CodePath.org Cybersecurity Course Graduate (2018)  
Virginia Tech Linux and Unix User's Group (2017 – Present, Vice President 2019)  
Virginia Tech Cybersecurity Club (2016 – Present)  
Virginia Tech Student Chapter IEEE (2015 – Present)  
Virginia Tech Computer Science Community Service Club (2015 – 2016)