# Charlie Houghton

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#### **EDUCATION**

University of Virginia

August 2017 - May 2021 (Expected)

BS Computer Science & BA Economics

GPA: 3.6

## **SKILLS**

Programming Java, C++, Python, x86 Assembly, Bash Scripting

Web Development JavaScript, HTML 5, CCS 3
Cloud Computing Platforms Google Cloud Platform, AWS

ContainerizationDocker, SingularityVersion ControlGit, Subversion

Distributed Systems Slurm Workload Manager, Grid Computing with Genesis II

## WORK EXPERIENCE

## Lancium Technology and Services

June 2019 - Present

Distributed Systems Intern

· Worked with a new Cloud Computing platform with renewable energy as the primary cost-saving focus. My main tasks included containing arbitrary job execution (substantially reducing our attack surface) and developing a Bash front-end to support high-throughput users who want to run many jobs rapidly. I also researched how to best handle frequent power outages with minimal impact to users.

## University of Virginia

February 2019 - Present

Teaching Assistant

· TA for Discrete Mathematics (CS 2102), a class primarily taught with functional proof-assistant language, Lean Prover. I lead review sections and bi-weekly TA sessions. I was very active on our course's forum with 500+ contributions.

## **Insight Interfaces**

 $\mathrm{May}$  - July 2018

Software Development Intern

· Web-based front-end development and design. Researched, documented, and implemented connectivity and bandwidth optimizations for video streaming. Redesigned some of the existing front-end with UX at the forefront of design decisions.

## **Bublup**

June - August 2015 & 2016

Quality Assurance Intern

· Used JIRA and Excel to discover, document, and coordinate fixes for bugs in a production-level application.

## **CERTIFICATIONS**

CompTIA A+ Hardware and Network Technologies and Troubleshooting

CompTIA Security+ Attacks and Vulnerabilities, Access Management, Risk Management