

# Rohit Musti

**portfolio website:** <https://rohitmusti.dev> **github:** <https://github.com/rohitmusti>

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## Education

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University of Virginia

Bachelors of Arts, CS '19

Masters of CS (3 + 1) '20

Undergraduate GPA: 3.5, Graduate GPA: 3.7

Honors: Jefferson Scholar (full ride merit scholarship), Echols Scholar, Dean's List

Focus: Deep Learning, Algorithms, Cryptography, Social Impacts of Technology

## Work Experience

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### Red Hat: AI Center of Excellence

*AI Research Intern, Summer 2019*

- Designed internal dataprocessing pipeline to clean and featurize client interaction data
- Researched NLP question and answering and text generation techniques, working towards a client-facing bot
- Identified structural issues with the state of the art NLP techniques that block approaches scalable solutions

### Red Hat: Open Innovation Labs

*SRE Intern, Summer 2018*

- Worked directly with the software reliability engineering team to solve pressing back log items to stabilize dev-ops pipeline
- Automated infrastructure deployment of Open Shift and all relevant tooling, saving an estimated 100 hours per client
- Built search feature for the Open Practice Library from scratch to increase access to the library
- Participated in the Open Innovation Lab's DevOps Enablement training: learned Agile and DevOps best practices

### The Impact Labs Fellowship

*Inaugural Impact Fellow, Winter 2018*

- A selective computer science fellowship focused on developing technical social entrepreneurs
- Completed courses on advanced blockchain, and web development tools
- Met speakers and leaders from NGOs, social startups, think tanks, and philanthropic organizations
- Developed a team project that automates mentorship of at-risk youth

### University of Virginia: Teaching Assistant/Lecturer

*Teaching Assistant, Spring 2017 - Spring 2020*

- Spring 2020, I will work for Dr. David Wu as a Teaching Assistant. I will grade homework assignments and guest lecture.
- As the Head TA of Algorithms, organized weekly recitations to recap lecture, organize & facilitate weekly office hours
- Created and administrated course policies for a class of more than 135 students
- Designed homework and exams and create test suites
- Hired and managed staff of TAs

## Research & Independent Projects

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### Research: Zero Knowledge Data Assesment

*Researcher, Fall 2019 - Present*

- Proposing novel zero-knowledge protocol for data assesment and analysis for Masters cumulative project.
- Developing R and Python packages to deploy protocol and tool to be used by non-technical groups.

### Research: Natural Language Processing

*Researcher, Fall 2019*

- Identified and defined code switching detection from Linguistics as a problem tractable by NLP.
- Developed ensemble learning technique to approach problem with high accuracy.

### The Digital Governance Lab

*Co-Founder, Spring 2019 - Present*

- Co-founded Digital Governance Lab (DGL) at UVA to support civic technology and expand interdisciplinary collaboration
- Co-wrote grant application to the Public Interest Grant: University Network from New America
- Co-teaching the pilot class, co-running the speaker series, and fundraising to expand the lab

### Student Taught Course: Spatial Reasoning

*Instructor, Fall 2018*

- Created curriculum and course content with fellow instructor and Professor Luther Tychonievich
- Implemented research based lesson plans to increase student engagement
- Collected data on course to focus on data driven improvements for tangible change

### The Hult Prize

*Regional Semi-Finalist, Spring 2018*

- The Hult Prize is the world's biggest engine for the launch of for-good, for-profit startups emerging from universities
- Competed in the regional finals as one of 3,000 teams out of 100,000 applicants
- Our idea was varying powerline currents to eliminate energy theft (a 90 billion dollar problem)

## Skills

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**Programming Languages:** Python, Java, C++, C, Javascript, R

**Tools:** L<sup>A</sup>T<sub>E</sub>X, Pytorch, Tensorflow, Ansible, Docker, Django, Markdown

**Project Management:** Git, Agile, Trello, Asana