Rohit Musti

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Education

University of Virginia — Undergraduate GPA: 3.5, Graduate GPA: 3.7
Bachelors of Arts, Computer Science '19 — Honors: Jefferson Scholar (full ride merit scholarship), Echols Scholar, Dean's List
Masters of Computer Science *(3 + 1)* '20 — Focus: Deep Learning, Algorithms, Cryptography, Social Impacts of Technology

Work Experience

Red Hat: AI Center of Excellence *AI Research Intern, 40 hours/week, May - August 2019*
- Designed internal dataprocessing pipeline to clean and featurize client interaction data for AI Natural Language Processing
- Researched NLP question and answering and text generation techniques, working towards a client-facing chat bot
- Identified structural issues with the state of the art NLP techniques that block approaches scalable solutions

Red Hat: Open Innovation Labs *Site Reliability Engineering Intern, 40 hours/week, May - August 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, 30 hours/week, January 2018*
- A selective computing fellowship (roughly 20 students accepted out of 800) aimed at developing digital social entrepreneurs
- Learned about advanced blockchain & web dev tools; met leaders from NGOs, startups, think tanks, & philanthropies
- Developed a team project that automates mentorship of at-risk youth

Teaching

Graduate Cryptography *Teaching Assistant, 5 hours/week, January 2020 - present*
- Hold 1.5 weekly office hours for a class of 30 students, as sole TA, and proof read all 5 homework assignments
- Grade 5 homework assignments & take home exam for all 30 students, and write test cases for 2 programming homeworks

Albemarle-Charlottesville Regional Jail *Volunteer Teacher, 5 hours/week, January 2020 - present*
- Designed 2 short courses following jail policies (no internet or outside materials) covering computer basics for inmates
- Courses taught to 2 sections of 6 inmates each (maximum per section) who have little to know experience with computers

Student Led Class: Digital Governance Lab *Student Instructor, 5 hours/week, August 2019 - Present*
- Developed public interest technology curriculum to critically examine the impacts of digital technology (13 seminars/semester)
- In the Fall, taught to 8 students (5 tech & 3 policy), culminating in a critique of senior engineering capstone projects
- In the Spring, taught to 6 students (4 tech & 2 policy), each developing their own public interest tech policy or project

Algorithms *Head Teaching Assistant, 20 hours/week, January - May 2018*
- Managed team of 5 TAs and organized review sessions twice a week to recap content
- Edited 10 homework assignments, designed 2 exams, at least 3 test cases per homework, & managed auto-grading tools

Introduction to Computer Science *Teaching Assistant, 10 hours/week, January - December 2017*
- Led 2 lab group review sessions per semester, graded 20 homework assignments/exams for over 20 students each semester
- In first semester, helped over 180 students, most of any other TA

Research & Independent Projects

Research: Natural Language Processing *Researcher, August - December 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 Hult Prize *Regional Semi-Finalist, December 2017 - March 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

Programming Languages: Python, Java, C++, C, Javascript, R
Tools: LaTeX, Pytorch, Tensorflow, Ansible, Docker, Django, Markdown
Project Management: Git, Agile, Trello, Asana