
Education

- UVA (University of Virginia) third year Echols Scholar – Majoring in Physics and Computer Science
- South Lakes High School, Virginia, USA – class of 2018 (IB Diploma and Advanced Diploma recipient)

Experience

Teaching Assistant for Computer Algorithms (CS 4102)

(June 2020 – Present)

Responsibilities:

- Grading assignments and exams
- Holding office hours for a class of around 300 students

Grader for Introductory Physics II (PHYS 1720)

(January 2020 – May 2020)

Responsibilities:

- Grading written homework for the class over the course of the semester
- Took on duties as night watchman for the Physics Building, which entailed locking up the building after classes ended, and assisting those who asked for help with basic tasks in the building such as setting up demos, moving equipment, etc.

Research Assistant at UVA for Mu2e collaboration with Professors Craig Dukes and Craig Group (June 2019 – Present)

The Mu2e experiment is a collaborative experiment, beginning in 2022, with Fermilab, and many other institutions throughout the United States and Europe, looking to find an instance of Muon to Electron conversion. I worked with the UVA group, which was in charge of building many of the detector modules for the experiment.

Responsibilities:

- Analyzing module efficiencies for Mu2e modules with CERN ROOT and Python through data analysis of over 500,000 data points
- Presenting findings during technical meetings with researchers from other universities in the U.S. and abroad on module efficiency data
- Designing graphical interfaces for analytical scripts with Python and JavaScript
- Helping polish crystal chambers for Mu2e modules in the machine shop

Teaching Assistant for Introductory Computer Science in Python (CS 1110/1111)

(January 2019 – May 2020)

Responsibilities:

- Graded assignments and exams
- Led programming lab sections of up to 50 people
- Held office hours to help 500+ students each semester with their programming assignments
- Held review sessions before exams to explain programming concepts to up to 200 students

**UVA International Relations Organization (IRO) Treasurer
(November 2019 – Present)**

Responsibilities:

- Managing club finances of around \$80,000
- Detailing expenses for end-of-semester reports and taxation purposes
- Delegating funds to the different branches of UVA IRO
- Resolving monetary conflicts between the different branches of IRO
- Raising money for the club through UVA student council
- Taking part in Executive Board decisions such as event planning, etc.
- Created scripts in Python to scrape data from the IRO bank account and Venmo for analysis

**Model United Nations
(September 2014 – Present)**

Responsibilities:

- UVA
 - Vice-chaired a committee for Virginia Model United Nations (VAMUN) at UVA
 - Directed a committee for VAMUN at UVA
 - Directed 2 committees for the Virginia International Crisis Simulation (VICS) at UVA
 - Traveling with the UVA team to conferences at UCLA, Georgetown University, and Columbia University

Major Educational Experiences in High School

Virginia Spacegrant Summer Academies at NASA Langley Research Center

- VESSS (Virginia Earth System Science Scholars) (July 2018)
- VASTS (Virginia Aerospace Science and Technology Scholars) (June 2017)

Additional Activities

- Society of Physics Students (November 2018 – present)
- International Relations Organization at UVA (October 2018 – present)

Skills

- Python, Java, Mathematica, C++, C, ROOT, HTML, JavaScript, x86, and Bash scripting
- Proficient in the creation and usage of structures such as Linked Lists, AVL Trees, and hashtables
- Proficient in the usage of Vim, Emacs, LaTeX, and Unix environments
- Certified for Microsoft Office Excel, Word, and PowerPoint via Certiport
- Fluent in Hindi
- Working knowledge of spoken and written Spanish

Awards

- Dean's List Fall 2018, Spring 2019, Fall 2019
- Verbal Commendations at Columbia University and UCLA Model UN Conferences (October 2018, April 2019)
- IB Diploma (Awarded January 2019)
- VESSS NASA Langley Summer Academy Certificate of Completion (July 2018)
- Summer Governor's School Certificate of Completion (July 2017)
- VASTS NASA Langley Summer Academy Certificate of Completion (June 2017)