

## EDUCATION

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### **Stony Brook University**

B.Sc. in Physics

Stony Brook, NY

2020- 2022

- Senior Writing Requirement Report: “Mossbauer Spectroscopy”

### **SUNY Schenectady County Community College**

A.S. in Math and Science

Schenectady, NY

2018–2019

- Phi Theta Kappa Honor Society

### **University College Dublin**

Pursued coursework relevant to physics bachelor's, Trinity French Intervarsity Debate Winner

Dublin, Ireland

2016–2017

## SKILLS

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- **Technical Skills** Python, Fortran, Java Linux OS, Bash, LaTeX, Basic Electronics and Instrumentation
- **Languages** Intermediate French, Spanish and Irish.
- Project management, public speaking and presentation, technical writing.

## COURSEWORK

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- Programming with Java
- Discrete Mathematics: Logic and Proof
- Electronics and Instrumentation Lab
- Computation in Physics and Astronomy

## EXPERIENCE

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### **International Atomic Energy Agency**

Accelerator Science Engagement Intern

Vienna, Austria

September 2022- August 2023

- -Prepare web-based materials to promote the IAEA e-learning and CRP results on using ion beam accelerators for quantum science.
- -Assist the maintenance and development of the IAEA Accelerator Knowledge Portal, including multi-media tools to promote the applications of various type of accelerators.

### **Brookhaven National Lab**

Accelerator Physics Intern

Virtual

June 2022- August 2022

- Studying feasibility of an unconventional particle injection method for Electron Ion Collider

### **Paragon One/Pfizer**

Manufacturing Strategy Extern

Virtual

Feb 2022- March 2022

- Created case studies to showcase how predictive maintenance can be implemented by Pfizer OSD manufacturing.
- Chosen out of 30 students to present my 3 step implementation strategy to Pfizer OSD Technical Leadership.

### **Brookhaven National Lab**

Quantum Computing Education Intern: Office of Educational Programs

Virtual

May-Aug 2021

- Created a 2-day introduction to quantum computing for ~ 20 high school students as part of Summer Science Explorations Workshop.

### **SUNY Schenectady County Community College**

Physics and Math Tutor

Schenectady, NY

Oct-Dec 2019

- Conducted individual and groups sessions for calculus 1 and college intro physics coached returning students in problem solving and test taking skills

## Queensborough Community College

Cosmic Ray Research Intern

Queens, NY

May-Aug 2019

- Project Title: Tracking Sagittarius A\* with Cosmic Ray Tracking Detector
- Collected and analyzed cosmic ray flux data
- Wrote 9- page report available on [quarknet.org](http://quarknet.org) website and presented work at onsite presentation session, national conferences

## Cornell University

Accelerator Physics Research Intern

Ithaca, NY

May-Aug 2018

- Project Title: Decoherence Simulation Studies for CESR at Low Energies
- Investigated decoherence phenomenon using FORTRAN computer simulations at Cornell High Energy Synchrotron Source (data analysis, plotting, programming)

## SUNY Schenectady County Community College

Trustee

Schenectady, NY

2018-2019

- Member of Board of Trustees with full voting privileges
- Advocated for pressing student issues with School President, Tutoring Director and Academic Advising Official
- Represent student body to wider community e.g. Trustee Legislative Dinner, Middle States Commission Visit

## PROJECTS

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### SPS Peer Mentoring Program October 2020 - May 2022

- Launched peer mentorship program for ~ 15 Stony Brook physics undergraduates
- Co-wrote successful Future Faces in Physics grant award, receiving \$ 500 in funding
- Project selected to feature in SPS Observer Fall 2022 magazine

### “Mindset multiplies Math: $M^2$ ” Seminar, October 2018

- Disheartened by prevalent negative attitudes concerning math on my campus, I organized a math outreach seminar
- Independently sourced funding, contacted University at Albany professor and designed seminar materials

## PRESENTATIONS

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1. N.Ubadike, R. Armendariz, “Tracking Sagittarius A\* with Cosmic Ray Tracking Detector”, *National Mentoring Conference, Orlando FL, February 2020 and Conference for Undergraduate Women in Physics, Pittsburgh PA, January 2020*
2. N.Ubadike, R. Bjorkquist, “Decoherence Simulation Studies for CESR at Low Energies”, *Cornell University Summer REU Research Symposium, Ithaca NY, July 2018*