

Nkeiru Campbell-Ubadike

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EDUCATION

Stony Brook University, SUNY

May 2022

Bachelor of Science in Physics

Dean's List Fall 2020 – Spring 2021

Schenectady County Community College, SUNY

December 2019

Associate of Math & Science

Dean's List Spring 2017 – Fall 2019

SKILLS

Technical Skills: Python, Fortran, Bash, HTML/CSS, electronics and instrumentation

Software and OS: Linux OS, Microsoft Windows, Git, Visual Studio Code

Soft Skills: Large facility incident response and troubleshooting, technical writing, public speaking and presentation

PROFESSIONAL EXPERIENCE

Cornell University, Particle Accelerator Operator | Ithaca, NY

June 2024 – Present

- Responsible for start-up/shutdown of linear accelerator and synchrotron system, ensuring optimal performance and safety during high energy x-ray experiments
- Monitor particle accelerator systems including vacuum, cryogenic and water systems, communicating issues with these systems to relevant system experts

City of Albany, Clean Energy Intern | Albany, NY

February 2024 – May 2024

- Researching ownership models and barriers to implementation for thermal energy networks/district geothermal systems for City of Albany
- Collected information that aided Office of Sustainability in receiving \$500k in CSC and CEC grants
- Presented findings to Office of Sustainability and the Mayor of Albany

International Atomic Energy Agency, Physics Section Intern | Vienna, Austria

September 2022 – September 2023

- Planned and implemented complete restructuring of Accelerator Knowledge Portal website to Microsoft SharePoint resulting in 18,000 € in IT cost savings
- Led design sessions with accelerator specialists in Physics Section for Accelerator Knowledge Portal website
- Wrote and created articles and videos to promote the IAEA e-learning on using ion beam accelerators for cultural heritage

Brookhaven National Lab, Research Intern | Upton, NY

May 2022 – August 2022

- Assessed feasibility of an unconventional particle injection method named slip stacking for Electron Ion Collider
- Upgraded Fortran program to simulate slip stacked electron beam dynamics in Rapid Cycling Synchrotron
- Developed Jupyter notebook to calculate required beam parameters

Brookhaven National Lab, Quantum Computing Education Intern | Upton, NY

May 2021 – August 2021

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

Cornell University, Research Intern | Ithaca, NY

May 2018 – August 2018

- Project Title: Decoherence Simulation Studies for CESR at Low Energies
- Investigated decoherence phenomenon using computer simulations implemented in Fortran at Cornell High Energy Synchrotron Source

Schenectady County Community College, Trustee | Schenectady, NY

January 2018 – December 2019

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

PROJECT EXPERIENCE

Review of Accelerator Science Internet Content | IAEA

- Developed Python script using Google Custom Search JSON API to web scraping accelerator science related content
- Wrote report on contents found related to accelerator science on the internet