Afura Taylor | afura.taylor@gmail.com

Relevant Skills

Trello, Asana, Streak, Project Management

Education

Princeton University: Graduate Student, Ph.D. Program in Physics 2021-2023

Massachusetts Institute of Technology: B.S., Double Major Physics and Creative Writing 2021

Work Experience

Project Lead, Poetic Justice Group (PJG)

Aug 2023-Jan 2024

Managed the Poetic Justice Group's Black Forest project. Developed project plans and goals. Created scheduling, messaging, and project goals. In addition, advised the PJG's lead on the group's marketing and methodology to best achieve the Black Forest's vision. Coordinated with community collaborators nationwide to ensure event success.

Physics and Math Educator

Sept 2021-Oct 2023

Established my own online tutoring business serving middle and high school students living in the Northeastern U.S. Created lesson plans attuned to school district requirements, coordinated with parents on scheduling, and helped students progress from marginal to excellent academic performance. Taught A.P. Physics to BIPOC students. Reached out to potential clients and marketed my services.

Teaching Assistant, The Summer Science Program (SSP)

June-Aug 2021

Managed scheduling for students. Created a revision program to teach students fundamental Python and command line skills and provided a space for students to ask questions. Helped students understand lecture material, graded problem sets, and created activities for students to do outside of coursework.

Mentor, MIT Physics Department Mentor Program

Sept 2020-May 2021

Assisted students with problem sets, coursework, and exam preparation as part of newly established program. Worked with two students for the academic year. Helped provide younger mentees with career and departmental advice. Gave feedback on how the program could improve.

Teacher, BoSTEM Summer Program

June-Aug 2018

Taught university level mechanics to high school students underrepresented in STEM in MIT based program. Created lesson plans and tests. Contributed program design ideas derived from teaching experience for organizational development.

Research Experience

Research Assistant, MIT Center for Theoretical Physics

Sept 2019-March 2021

Conducted analysis and model comparisons using Python on Gamma Ray data from the Galactic Center Excess. Demonstrated model dependency on diffuse background model of NPTFit. Created research project budget and schedule.

Research Assistant, Caltech TAPIR, LIGO SURF Program

June-Aug 2019

Selected as one of 20 fellowship recipients among nationwide applicant pool. Utilized AI with Python to create a novel computational model of peak luminosity of black hole mergers. Published results in *Physical Review D* (102.104047).

Research Assistant, MIT Laboratory for Nuclear Science

June 2018-June 2019

Conducted analysis on hard X-ray data from Sagittarius (Sgr) B2 gas cloud utilizing Python. Created models of the spectral flux of Sgr B2. Created a presentation comparing results with past Sgr B2 data, focusing on whether the emission of Sgr B2 is decreasing or has reached a constant. Published results in the *Astrophysical Journal* (2108.13399).

Leadership Experience

MIT Ridonkulous (Dance Team) President

May 2020-May 2021

Led executive board of the dance team. Created budget and structural goals for the team. Helped navigate COVID safe policies during leadership tenure. Invited local Boston dancers to lead virtual workshops with the team.

MIT Black Women's Alliance (BWA) Treasurer

June 2018-May 2019

Fundraised roughly \$50,000. Spearheaded a scholarship program for members. Coordinated the budget of BWA's annual banquet. Managed the logistics of hiring local restaurants to cater events.