Rajib Rezwan Chowdhury

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EDUCATION

B.S. in Physics CGPA: 3.9

Fall 2019 - Present

University of Central Florida, Orlando, FL

Relevant Coursework:

Physics I w/ Calculus, Physics II w/ Calculus, Calculus w/ Analytic Geometry I-III, Ordinary Differential Equations, Computer Science I, Linear Algebra

EXPERIENCE

CREOL Research Assistant

Spring 2020 - Present

College of Optics and Photonics, Orlando, FL

- Working with Dr. Yehuda Bramain to develop models of chaotic phenomena within arrays of superconducting Josephson junctions.
- Wrote numerical solver of nonlinear differential equations using Runge-Kutta and Euler's methods in the C programming language.
- Replicated figures from known literature and used gnuplot software to analyze time series data and guide analytic solutions to nonlinear systems of equations.

Arecibo Observatory Research Assistant Arecibo Observatory, Arecibo, Puerto Rico Summer 2020 - Present

- Member of the APPSS survey. Working with Arecibo Observatory (world's second largest single aperture telescope) and a coalition of universities to analyze HI spectral data collected from ALFALFA survey.
- Made extensive use of TOPCAT software to study Pisces-Perseus supercluster from 7 beam L-band receiver, and replicated functionality in Python.
- Involved in planning of future galactic surveys, including the future operation of the ALPACA 40 beam receiver.

Vice President of Books for Rwanda University of Central Florida, Orlando, FL Fall 2019 - Spring 2020

- Worked with Student Government of UCF Executive Branch and SGLC to fundraise money and collect books for schoolchildren in Rwanda, providing over 500 books.
- Created a website and reached out to community leaders for support at booksforrwanda.wixsite.com/website

Student Government Leadership Council University of Central Florida, Orlando, FL Fall 2019 - Spring 2020

- Mentorship program within UCF Student Government
- Traveled to Tallahassee, FL to talk with legislators to advocate for issues such as food and housing insecurity on behalf of the students of UCF.

EXTRA-
CURRICULAR
SERVICE

Kumon Tutoring Center, Math and Reading Tutor	2016 - 2017
JFK Medical Center, Volunteer	2017 - 2018
Max Planck Florida Institute for Neuroscience, Visitor	2017 - 2018