Amanuel S. Anteneh

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(757) 335-8351
GitHub Website

EDUCATION

University of Virginia **Charlottesville, VA**
Class of 2022
College of Arts and Sciences
Computer Science & Physics Double Major
Mathematics Minor
GPA: 3.5 / 4.0
Echols Scholar
Dean's List Honor

WORK EXPERIENCE

University of Virginia – Applied Mathematics Department | Charlottesville, VA
Teaching Assistant – Complex Variables with Applications Summer 2020

Held office hours four times per week for whole duration of 4-week complex analysis summer course to answer students' questions about homework assignments on topics such as manipulation and algebra of complex numbers, complex integration, residue theory, and series representations of analytic functions. Graded student homework for duration of summer course.

University of Virginia - High Energy Physics Laboratory | Charlottesville, VA
Laboratory Assistant December 2018 – March 2020

Provided both computational and experimental assistance in high energy physics laboratory environment for the Compact Muon Solenoid (CMS) detector project for CERN under Dr. Bradley Cox. Designed software to interpret and analyze data recorded by various experimental apparatuses as well as constructing different gadgets in machine shop to construct apparatuses. More recent work involved creating Teflon molds for different types of glues and recording ratios of light transmission before and after exposing samples to different levels of radiation.

SKILLS

Experienced in: C++/C, Python, Java, Qt, JavaScript, HTML, CSS, x86 Assembly, git
Courses Taken: Calculus III, Linear Algebra, Complex Analysis, Machine Learning, Program & Data Representation, Algorithms, Quantum Physics I, Probability, Partial Differential Equations, Computer Architecture, Theory of Computation, Computational Physics I, Software Development Methods, Statistical Physics
Will Have Taken: Quantum Physics II, Database Systems, Group Theory for Condensed Matter Physics, Survey of Abstract Algebra, Electricity & Magnetism I

PROJECTS

QHome (Qt-Home)
Personal Project

QHome is a desktop application intended to bring multiple tasks that are done while studying/doing homework to one convenient location. Features include ability to connect user's Beats wireless headphones, notepad widget to write in for future reference, opening various local files and webpages associated with the course the user is doing work for, controlling Spotify playback such as playing/pausing/queuing, and a display of the weather conditions of user's current location.

YouTube Music Control

Personal Project

A Firefox extension which allows users to control the playback of their YouTube music tab from any other tab in the Firefox window. Users can play, pause, skip to next or previous song, change the player volume and display song information when hovering their mouse over the album art of the song.

STEM Visualizers

Personal Project

These simulators on my website are written with JavaScript, specifically the libraries D3.js and Plotly.js. The purpose of these simulators is to allow students from various STEM fields such as physics & mathematics better visualize hard to understand concepts in the respective fields.