

Contact

denance@davidson.edu

www.linkedin.com/in/delario-nance-jr (LinkedIn)

Top Skills

Python (Programming Language)

pytest

Data Structures

Languages

Spanish (Elementary)

English (Native or Bilingual)

Certifications

Programming Foundations: Software Testing/QA

Networking Foundations: Networking Basics

Honors-Awards

4th Chair Violist in All-State Orchestra

1st Chair Violist in Region Orchestra

R. Bruce Jackson Jr. Mathematics Award

Delario Nance, Jr.

Computer Science Tutor at Davidson College | Research Background | Passion for Software Quality | Mathematical & Musical
Greenville-Spartanburg-Anderson, South Carolina Area

Summary

As I recall my previous research experiences, a common theme arises: the transformation of data into various forms. At the University of Tennessee, Knoxville, I studied how the tool known as SWIG allows developers to convert C++ code into "wrapper" code usable with the Python programming language. Additionally, at Davidson College, I investigated how the open-source Python library Pypianoroll represents musical data as numerical matrices.

In studying mathematics, I love how an equation or idea can be transformed into seemingly unrelated, yet equivalent, forms! A prime example of such is the Invertible Matrix Theorem from linear algebra. Put simply, the Invertible Matrix Theorem is a collection of 20+ mathematical statements which seem unrelated at first glance but are secretly different ways of conveying the same information! Thus, when working as the Embedded Tutor for Davidson College's Linear Algebra course, I strove to promote my fellow peers' creative problem solving by displaying how each of the Invertible Matrix Theorem's statements are secretly linked!

Like mathematics, the conversion of ideas into many different forms with unique advantages and disadvantages appears prominently in computer science. Thus, to me, computer science is simply mathematics. Like how the Invertible Matrix Theorem poses various ways to say the same mathematical statement, data structures each possess their unique pros and cons but all share the same purpose: to store data. Likewise, the various types of programming languages (e.g., compiled, interpreted, object-oriented, declarative, etc.) offer developers a large pool of tools for solving a given problem.

Experience

Davidson College

8 months

Programming and Problem Solving Embedded Tutor

January 2024 - Present (3 months)

Davidson, North Carolina, United States

Probability Embedded Tutor

August 2023 - December 2023 (5 months)

Davidson, North Carolina, United States

Davidson College

Linear Algebra Embedded Tutor

August 2021 - December 2022 (1 year 5 months)

Davidson, North Carolina, United States

University of Tennessee, Knoxville

2022 RECSEM REU Researcher

May 2022 - August 2022 (4 months)

Knoxville, Tennessee, United States

Davidson College

Research in Science Experience (RISE) Researcher

May 2021 - June 2021 (2 months)

Davidson, North Carolina, United States

Education

Davidson College

Bachelor of Science - BS, Computer Science, Mathematics · (August 2020 - May 2024)

Dorman High School

High School Diploma, STEM · (August 2016 - May 2020)