Permanent Address: https://github.com/ MichaelWalker1111

Michael Duncan Walker

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Current Address: www.linkedin.com/in/ michael-duncan-walker

Education

University of Virginia, Charlottesville, VA

August 2021 - August 2024

B.A. Mathematics

- Concentration in Probability and Statistics
- Relevant course work: Advanced Linear Algebra, Probability and Inference, Introduction to Mathematical Statistics, Introduction to Stochastic Processes, Introduction to Data Science with Python
- Major GPA: 3.131/4.0

Northern Virginia Community College, Annandale, VA

January 2019 - May 2021

A.S Computer Science and Science: Mathematics Specialization

- Vice President of the Coding Club
- Dean's List Multiple Semesters
- Double Major in Math and Computer Science
- GPA 3.3/4.0

Projects

Stock Price Predictor, Intro to Data Science with Python

January 2024 - Present

Multinomial Logistic Regression and Random Forest Algorithms

- Implemented machine learning algorithms on processed time series data on SPY, with over 28,400+ data points, to create a model on stock price prediction with a mean squared error of 9 x 10^-5--tested on the last 20% of data
- Initiated a random forest algorithm to determine if, in a given time interval, value of VOO will go up or down with a prediction accuracy score of 48%--currently adding variables to better model the data

Work Experience

Mathnasium, Alexandria, VA

January 2022 - January 2023

Lead Instructor

- Managed a team of 7 instructors to analyze and designate proper training strategies for 200+ individual students, driving 90% of students to improve math grades at school
- Entrusted to maintain a quiet and clean work environment for students while interacting with parents, resulting in 94% of parents reporting an increase in students math skills and understanding
- Performed opening and closing store procedures, including inventory and organization of all products at end of every shift
- Acquired, on average, 5 new clients through cold calling every month, generating \$18,000 (annualized)

Northern Virginia Community College, Annandale, VA

March 2021 - August 2021

Mathematics Tutor

- Educated college students on all mathematics up to and including calculus, linear algebra, and differential equations
- Elaborated on applications of calculus and linear algebra in relevant systems, specifically C.S.
- Implemented simplified methods of learning differential equations to better systematize learning outcomes
- Provided individualized lesson plans for military veteran students seeking more aid, earning a discretionary fund of \$500

Skills Summary

- Proficient in: Python, R language, SQL, LaTex, Microsoft Office Suite (Word, PowerPoint, and Excel)
- Experience with: Java, Maple, Mathematica, ArcGIS