

Alexander Young

www.linkedin.com/in/alexander-young22

alexianyoung0203@gmail.com

(919) 935-1559

Available Immediately

Professional Summary

Results-oriented Mathematician with proven experience in developing predictive machine learning models and neural networks for industry-leading European firms. Adept at collaborating internationally and being able to leverage analytical expertise for any Industry. Recognized for effective communication, innovative problem-solving, and strong technical proficiency across data analysis, statistical modeling, and programming.

Relevant Professional Experience

OpenHub “Garage for Innovators”

Data Scientist Intern

May 2025 - Present

- Collaborated with an international, multidisciplinary team of top professionals in Belgium, gaining exposure in advanced data science and engineering methodologies.
- Built predictive machine and deep learning models for Fluxys to proactively mitigate corrosion risks in natural gas pipelines across Europe.
- Developed neural networks for Novobiom to optimize substrate combinations, enhancing fungal bioremediation of industrial pollutants like TPH.

University of North Carolina at Wilmington

Teaching Assistant

January 2024 - July 2024

- Implemented data-driven teaching strategies, elevating exam scores by 10% across three Engineering Calculus courses.
- Applied analytical skills to evaluate trends, act on insights, and enhance student comprehension.
- Arranged a mentorship program for 100+ students, raising engagement and motivation.
- Refined communication skills for complex concepts to engage stakeholders, an essential skill in analytical presentations.

Great Walls of Water: The Pandemonium and Phenomena of Rogue Waves

Researcher

January 2024 - May 2024

- Coordinated a team investigating rogue wave behavior using the NLSE and Gerstner’s equations, comparing model outputs to known solutions and improving simulation accuracy by 15%.
- Utilized Fast Fourier Transforms (FFT) to build MATLAB models simulating wave solutions, raising computational efficiency by 20%.
- Co-authored a scholarly article and presented findings to 300+ attendees, showcasing strong communication and technical translation skills.

Relevant Professional Experience (Continued)

MCM / ICM Math Modeling Competition hosted by COMAP

Team Leader

April 2024

- Led a team analyzing psychological momentum in sports, leveraging R to process large real-world datasets of 500+ variables.
- Conducted rigorous data wrangling and statistically significant variable selection for robust, data-driven models.
- Devised a predictive model in MATLAB, boosting model accuracy by 20% over baseline.

Education

Bachelor of Science, Applied Mathematics

University of North Carolina Wilmington,

July 2024

- Recognized on the Dean's List by the College of Science and Engineering for outstanding academic performance.

Skills

Data Analysis:	- Statistical Analysis, Data Wrangling, Statistical Techniques
Machine Learning:	- Predictive Modeling, Classification, Regression, Keras Extreme Gradient Boosting, Clustering, SciPy, Scikit-Learn,
Data Visualization / Analytics:	- Excel, Markdown, Notebooks, Dashboards, Python
Data Management:	- Big Data, Cleaning, Pre/Post Processing, Data Storytelling
Database Management:	- SQL, MySQL, Cloud Databases, RDBMS
Programming:	- Python, R, MATLAB, HTML, JavaScript
Version Control:	- Git, GitHub
Mathematical Software:	- R Studio, Maple, MATLAB, Simulink
Soft Skills:	- Team Collaboration, Problem Solving, Analytical Thinking
Languages:	- English (<i>Native</i>), German (<i>Speaking, Reading, Writing</i>)

Certifications

IBM: Machine Learning with Python (with Honors) **January 13, 2025**

Machine Learning, Clustering, Regression, classification, SciPy and Scikit-Learn

IBM: Data Analysis with Python **December 16, 2024**

Model Selection, Data Analysis, Python Programming, Data Visualization, Predictive Modeling

IBM: Databases and SQL for Data Science with Python (with Honors) **November 8, 2024**

Python, Cloud Databases, RDBMS, SQL, Jupyter notebooks

IBM: Python Project for Data Science **October 26, 2024**

Data Science, Data Analysis, Python, Pandas, Jupyter Notebooks

IBM: Python for Data Science, AI & Development **October 18, 2024**

Pandas, NumPy

IBM: Data Science Methodology **October 8, 2024**

CISP-DM, Data Mining

IBM: Tools for Data Science **October 6, 2024**

GitHub, Jupyter Notebooks

IBM: What is Data Science? **October 4, 2024**

Big Data, Deep Learning

Additional Experience

Uber **February 2021 - Present**

Rideshare Driver

Ruth's Chris Steakhouse **January 2023 - December 2023**

Fine Dining Server

BestBuy Warehouse **May 2022 - December 2022**

Process of Shipment, Fraud Detection, Risk Mitigation

Travel Sabbatical **December 2021 – May 2022**

Germany, France, Bulgaria, North Macedonia, Italy, Greece, Portugal, Czechia, United Kingdom, Ireland, and Netherlands

Pama Ceia Golf & Country Club **June 2019 - June 2021**

Bartender

The Bridge Tender **August 2017 - May 2019**

Fine Dining Server