

Logan Roach

Charlotte, NC

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<https://www.linkedin.com/in/logan-roach-8663b0240>

<https://github.com/LoganRoach>

Skills

Python (Programming Language), PyTorch, Keras, Numpy, R (Programming Language), SQL, Databases, Machine Learning, Deep Learning, Exploratory Data Analysis, Statistical Data Analysis, Regression Analysis, Logistic Regression, Statistical Software, Analytical Skills, Microsoft Power BI, Tableau, Data Mining, Predictive Modeling, Data Modeling, Business Analysis, Financial Analysis, Data Analysis, Research, Communication, Leadership, Teamwork, Problem Solving, Presentation Skills

Experience

Oak Ridge Associated University (ORAU) Contract Data Scientist at US Environmental Protection Agency

Nov 2022 - Present

- Data scientist with practical experience in data modeling and visualization with SQL, R, and Python.
- Recent projects focused on developing data processing pipelines for high-dimensionality scientific data produced in non-targeted analysis and high-resolution mass spectrometry, including:
 - Designed user interfaces to optimize data analytics pipelines for improved efficiency and decision-making.
 - Extracted and transformed data from large internal databases using sophisticated SQL queries to access databases behind proprietary software.
 - combining data from multiple research projects for comprehensive result summaries
 - converting it into user-friendly formats
 - creating insightful, reports, and visualizations using Tableau to drive data-driven decisions.
 - used results and reports to construct SOPs for future repetition.
 - Enhanced data pipeline efficiency through implementing automated analyses resulting in quicker data insights and improved data-driven strategies.

Graduate Lab Instructor, University of North Carolina Wilmington

Aug 2019 - May 2022

- Instructed 8 sections of undergraduate chemistry laboratories totaling 240 students and trained each in various fundamental techniques including:
 - General Chemistry Techniques (Experimental Design, Basic Laboratory Skills, Data Analysis)
 - Chemical Instrumentation (LC/GC, UV-Vis, Mass Spectrometry)
 - Organic Chemistry Techniques (Recrystallization, Extraction, Distillation, Chromatography)

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Education

Syracuse University

Master's degree, Applied Data Science

Data and Business Analytics, AI, Language Analytics

Jan 2023 - Present



University of North Carolina Wilmington

Master's degree, Chemistry

2019 – 2022, GPA 3.6

- Used Python to model and cluster compounds binding with an antifungal enzyme target.
- Thesis: Inactivation of Aspartate-Semialdehyde Dehydrogenase via Vinyl-Sulfone and Acrylamide Compounds.
- Co-authored: "Design and testing of selective inactivators against an antifungal enzyme target".



University of North Carolina Wilmington

Bachelor of Science, Chemistry

Aug 2014 - May 2019

Licenses & Certifications



Google Advanced Data Analytics Specialization - Coursera B7J3VW4BN29E

Summary

Graduated with a Master's in Chemistry from the University of North Carolina at Wilmington, currently enrolled in a Applied Data Science Master's Program at Syracuse University, and just completed the Google Advanced Data Analytics Specialization course with a focus using the Python programming language while working as a Data Scientist contracted at the U.S. Environmental Protection Agency through Oak Ridge Associated Universities. Practical experience in Data Analytics with the R and Python programming languages. Proficient in Exploratory, Data Analysis, Regression Analysis, Data Modeling, Data Visualization. Developed workflows in the R programming language to facilitate the data analysis of experimental mass spectrum results, extract spectral information from Agilent and Thermo Scientific databases for efficient data processing insights, and utilized clustering analysis to identify compounds from the non-targeted analysis of polyfluorinated species.

References

James McCord, United States Environmental Protection Agency

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