

PROFILE

Quality Specialist transitioning to Data Scientist, combining sharp analytical skills with a passion for transforming data into actionable insights. Experienced in hands-on projects involving predictive modeling, A/B testing, applied statistics, and data wrangling. Proficient in Python and SQL for exploratory data analysis, feature engineering, and machine learning. Skilled in crafting compelling data narratives through visualization and creatively applying data science to solve complex problems, streamline processes, and making data-driven decisions.

PROFESSIONAL EXPERIENCE

Quality Specialist II

Abbott Laboratories

08/2022 – present | Austin, TX

- Reviewed and validated device history records to ensure data accuracy and integrity, aligning with FDA compliance standards.
- Identified potential data inconsistencies and non-conformance in product batch records, recommending corrective actions.
- Developed data dashboards and Power BI visualizations to communicate quality trends and insights to team.
- Evaluated the effectiveness of corrective actions using accuracy metrics and statistical analysis.

Research Assistant at Bio-Integrated Lab

Wichita State University

09/2019 – 05/2021 | Wichita, KS

- Applied data analysis techniques to assess the performance of micro fabricated wearable ECG device for real-time ambulatory monitoring.
- Conducted signal processing and feature extraction from ECG data to identify critical health indicators.
- Automated data collection and visualization to analyze research findings.

EDUCATION

Master of Science in Data Science

University of the Cumberland

10/2022 – 12/2023 | Williamsburg, KY

3.91 GPA

- Engineered a comprehensive **data framework** for managing **AI-driven predictive genomics** (DNA).
- Demonstrated market basket analysis (**data mining**) to identify frequent itemsets and association rules utilizing **Snowflake & AWS Sagemaker's** Apriori algorithm.
- Developed a deep learning model using **Hopfield network** for classification of **MNIST data** as a model application for approving DHRs for medical devices.

Bachelor of Science in Biomedical Engineering

Wichita State University

01/2018 – 05/2021 | Wichita, KS

3.76 GPA

- Minor in Mathematics - Graduated Magna Cum Laude - Research Publication - **Enhancing the performance of dielectric elastomer actuators through the approach of distributed electrode array with fractal interconnects architecture** (Journal of Micromechanics and Microengineering, Volume 31, Number 6 · Apr 27, 2021).

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SKILLS

Programming

Python, SQL, R, UNIX commands

Data Analysis & Visualization

Power query, Power BI, Matplotlib, Seaborn

Big Data & Cloud

Pyspark, Spark SQL, AWS(S3, EC2, lambda, Sagemaker)

Applied Statistics

A/B Testing, Bayesian Methods, Experimental Design

Machine Learning & Deep Learning

Pandas, Scikit-Learn, TensorFlow, Keras, NLP, Transformers

PROJECTS

Heart Disease Classification Model 🔗

Built and evaluated **Logistic Regression** and **KNN** models on a Kaggle cardiovascular dataset. Achieved **76% accuracy (Logistic Regression)** and **82% accuracy (KNN)**. Optimized the model with **GridSearchCV**, improving accuracy to **88%**.

A/B Testing for Udacity Web Page Feature 🔗

Applied **hypothesis testing** & **Bayesian methods** to analyze the impact of a new web page feature on user engagement using data provided by Udacity. Measured **key metrics** to ensure **statistical** and **practical significance** and made data-driven recommendations on experiment results.

Pneumonia Detection on X-ray images Using Deep Learning 🔗

Trained a Convolutional Neural Network (**CNN**) on 5,856 pediatric chest X-rays, achieving 93.7% validation and **85% test accuracy**. Applied **transfer learning** with **ResNet50V2**, yielding 90.2% validation and **78% test accuracy**.

Product Analysis using SQL 🔗

Used **SQL** joins, aggregations and **CTEs** to extract **KPIs** by analyzing car sales record data utilizing **SQLite**.

Employee Productivity Classification 🔗

Built **Decision Tree** and **Random Forest models** to classify employee productivity. Applied **minimum-cost complexity pruning** to improve model's generalization. Achieved **80.83% test accuracy** across pruned and ensemble models.

CERTIFICATES

- AWS Cloud Practitioner (CLF-Co2)- DataCamp 🔗
- Data Scientist in Python - Dataquest 🔗
- Data Analyst in Power BI - DataCamp 🔗
- Analyzing large datasets in Spark and MapReduce- Dataquest 🔗