

Kyle Rodriguez

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EDUCATION & CERTIFICATIONS

University of Houston

- **Bachelor of Science, Computer Science | GPA: 4.0**
- **Bachelor of Science, Biochemistry**

May 2025
August 2023

Springboard | Online Data Science Certificate

April 2023 - Dec. 2023

- A 9-month intensive program in data science and machine learning with 1:1 industry mentorship and hands-on projects based on real world problems.

PROFESSIONAL EXPERIENCE

Data Science Intern, NOV | Houston, TX

Jun. 2024 – Present

- Developed and deployed custom data visualization apps using Python, Streamlit, Plotly and HTML/CSS for internal business units, enhancing data-driven decision-making.
- Containerized applications using Docker and managed deployments on AWS ECS with ECR, ensuring scalable and efficient operations.
- Leveraged SQL within Snowflake to query, retrieve and analyze relevant data for solving complex business problems.
- Applied machine learning algorithms, including clustering, classification, and forecasting, to address issues in supply chain management and detect fraud patterns, contributing to operational efficiency and cost savings.

Data Analytics Intern, Atlas Copco | Deer Park, TX

Jan. 2024 – May 2024

- Developed dynamic Power BI dashboards for real-time fleet availability analysis, optimizing logistical planning for Vice Presidents and District Managers across North America.
- Created an internal app using Microsoft PowerApps for tracking fuel consumption related to fleet maintenance, helping to improve sustainability tracking and emissions reporting.
- Utilize SQL to extract data from internal databases and used Python for processing and transformation to support various data-driven initiatives.

PROJECTS

Amazon Book Recommender System | Springboard

Nov 2023 – Dec. 2023

Tools: Python, PySpark, Jupyter Notebook, pandas, Git

- **Data Preprocessing:** Utilized PySpark to preprocess 51 million rows of Amazon book ratings and metadata, transforming the dataset into a format suitable for collaborative filtering.
- **Model Training:** Trained and evaluated multiple models, including SVD and k-NN, using MAE and RMSE as performance metrics; employed Grid Search for hyperparameter tuning.
- **Recommendation System:** Implemented an optimized k-NN model with the Surprise Python library, successfully generating top-n book recommendations tailored to user preferences and incorporating metadata for enhanced relevance.

SKILLS

- **Machine Learning:** Regression, Classification, Clustering, Time-series Forecasting
- **Languages:** Python (pandas, NumPy, scikit-learn, TensorFlow, PySpark), SQL, C++, HTML/CSS/JS and React
- **Microsoft:** Power BI, PowerApps, SharePoint, Excel, SQL Server
- **Cloud:** AWS ECS and ECR, Snowflake, Databricks