

SYED FAQUARUDDIN QUADRI

475-655-6862 | syed.faquar.quadri@gmail.com | [linkedin.com/in/syed-faquar-quadri/](https://www.linkedin.com/in/syed-faquar-quadri/) | New York City, NY | [GitHub1](#) | [GitHub2](#)

Data Engineer | Machine Learning Engineer

Data professional with applied experience in complex data analysis, machine learning, and conducting research. Experience building and scaling machine learning models, while using large amounts of data. Ability to collaborate with other data scientists and engineers to develop algorithms and scalable data systems and optimize data pipelines.

TECHNICAL SKILLS

Programming Languages: SQL, Python, R

Big Data Technologies: Hadoop, PySpark

Tools: Jupyter Notebook, Vscode, Pycharm

Cloud Platform: Google Cloud Platform, AWS

Machine Learning, AI, Deep Learning: Sklearn, SciPy, NumPy, Pandas, NLTK, PyTorch, Tensorflow.

Professional Skills: Teamwork, Communication, Leadership, Cross-functional Collaboration, Mentoring, Attention to detail, Client Management, Self-driven, Resiliency, Organized, Troubleshooting, Prioritization, Problem-Solving, Innovation, Strategic Vision, Maintaining High Product Quality, Willingness to Learn, Adaptive to New Technologies, Sophisticated, Improve User Experience.

Web Technologies & Databases: HTML, CSS, Fast API, Flask, MySQL

Data Visualization: Tableau, Matplotlib, Plotly

Version Control: GitHub, CI/CD

EDUCATION

Master of Science in Data Science, City College of New York (CUNY), August 2022 – May 2024

Bachelor of Science in Civil Engineering, Osmania University, August 2017 – May 2021

WORK EXPERIENCE

City College of New York (CUNY) | Graduate Research Assistant | February 2024 – Present

- Conducted comprehensive data analysis and research on Income Diversity based on Travel Patterns, resulting in a 15% increase in understanding travel behavior dynamics, aiding in targeted marketing strategies and urban planning initiatives.
- Applied constructive feedback to improve research methodologies and strengthen academic papers.
- Utilized unsupervised learning clustering techniques like K-means to identify distinct patterns in the data, elucidating the correlation between income levels and travel habits.

City College of New York (CUNY) | Teaching Assistant | January 2023 – Present

- Led individualized and group tutoring and instruction for 20 students per week in mathematics, with a focus on Calculus 1, Calculus 2, Linear Algebra, trigonometry, statistics, probability, and Intro to Data Science.

City College of New York (CUNY) | Graduate Research Assistant | October 2022 – January 2023

- Collaborated directly with a professor for a research project: *Machine Learning to Predict Hydrodynamic Load on Structure*.
- Led data collection process, using preprocessing techniques, filtering, normalization, and feature selection to ensure data quality and integrity, providing solutions for data exploration, analysis, and modeling.
- Developed and implemented a machine learning model to predict hydrodynamic loads on structures, achieving an accuracy rate of 73%, and demonstrating the effectiveness of the model in real-world applications.

PROJECT EXPERIENCE

NYC Food Insecurity | Data Engineer | 2023

- Analyzed the current state of food insecurity in NYC by using Apache Spark and Google Cloud DataProc to efficiently parse through 10 GB of data, 9.2 million rows of data with a processing time of less than 2.5 minutes.

Search Engine Design | Software Engineer | 2023, ([GitHub](#))

- Conceptualized and engineered a search engine from inception, employing a MySQL database as the backend infrastructure.
- Developed an algorithm to analyze user search queries and retrieve the most relevant results from the database based on word frequency patterns, improving the accuracy of search results by 40%.

Song Genre Classification | Machine Learning Engineer | 2022, ([GitHub](#))

- Built an AI system to automatically categorize songs as Hip-Hop or Rock genres using Echonest track data and audio features.
- Generated visualizations using pandas and seaborn to identify trends and factors while validating data results.
- Created a predictive model using **Machine Learning Algorithms** with 77% accuracy for Logistic Regression and 72% accuracy for Decision Trees, using features like danceability, energy, and tempo.

Movie Similarities from Plot Summaries | Data Engineer | 2022, ([GitHub](#))

- Applied Natural Language Processing (NLP) techniques to analyze movie plot summaries sourced from IMDb and Wikipedia.
- Utilized K-means clustering to categorize movies based on plot similarities; effectively cleaned and organized data.
- Achieved an 87% accuracy rate, enhancing the recommendation systems' effectiveness.

Web Scraping ETL | Data Engineer | 2023, ([GitHub](#))

- Engineered a Python-based ETL pipeline, while seamlessly integrating Google, Yahoo, Bing, and DuckDuckGo search engines.
- Automated search queries, extracted URLs, and retrieved textual data from result pages, streamlining data extraction process.
- Built and optimized data pipelines for efficient data transformation into a MySQL database, processing 1 search query and inserting an average of 50 results per query, ensuring efficient data management and retrieval.