

VAISHNAVI RAJPUT

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EDUCATION

New York University

New York, NY

Master of Science

Sep 2021 - May 2023

Major in Computer Engineering; CGPA: 3.53/4.00

Relevant Coursework: Machine Learning, Deep Learning, ML for Cyber Security, Principles of Database Management

WORK EXPERIENCE

Development Data Analysis Intern

New York, NY

Block Convey

Jun 2023 – Present

- Managed a team of 5 interns to develop a blockchain-integrated machine learning system and accomplished a 30% reduction in data breaches
- Optimized a Deep Learning Forecasting model for brain tumor detection to achieve 93% accuracy
- Conducted research and analysis to explore the strategic convergence of AI/ML and Blockchain within the market and generated valuable insights that catalyzed sales expansion

Graduate Assistant

New York, NY

New York University

Oct 2022 – May 2023

- Coordinated and facilitated doubt-clearing sessions and exams for undergraduate courses (Data Structures and Algorithms and Introduction to Programming) to streamline the administration of over 300 students

Data Science Intern (Virtual)

New York, NY

British Airways

Feb 2023 – Mar 2023

- Developed an AirFlow ETL pipeline and a statistical model with 85% enhancement of customized marketing strategies
- Extracted 70 GB of data and addressed 4 concern areas by doing sentiment analysis and using other NLP techniques

PROJECTS

Email Marketing Content Assistant | Python, OpenAI, Streamlit

Aug 2023

- Integrated OpenAI API with Streamlit Cloud to generate personalized email templates based on user-provided criteria and reduced content creation time for clients by 40%

Recommendation System | Python, Apache Spark, Hadoop

Apr 2023 - May 2023

- Built a music recommendation system by creating a popularity baseline model and using collaborative filtering methods; improved metrics such as precision, NDCG, and RMSE by 10%
- Conducted benchmarking to compare single-machine and cluster-based execution and reduced model fitting time by 20.6% and accuracy calculation time by 30.1%

Customer Churn Prediction | Python, Apache Spark, Hadoop, Flask

Feb 2023 - Mar 2023

- Performed EDA to identify churn drivers; leveraged various statistical methods to construct a churn prediction model with 94% accuracy; and designed a Flask application to enable real-time usage

Mu-GAN: Generating Adversarial Modified Music | Python, TensorFlow, Keras

Nov 2022 - Dec 2022

- Formulated a DC-GAN extension architecture to generate novel music of a genre or modify existing music to a new genre

ETL System Development for Data Warehousing (Capstone) | SQL, MySQL, PostgreSQL, Tableau

Aug 2022 - Dec 2022

- Constructed an inventory management system and achieved efficiency by reducing the turnaround time by 12% using 3NF Normalized queries and Query Optimization
- Implemented ETL pipeline to automate data extraction, transformation, and loading in the PostgreSQL data warehouse, reducing data processing time by 50%, and used Tableau for data visualization

SKILLS

Languages: Python, SQL, Java, HTML, CSS, C++

Tools: AWS, Apache Spark, Hadoop, MapReduce, AirFlow, Tableau, Microsoft Excel, Git

ML Libraries: Matplotlib, Seaborn, Keras, TensorFlow, PyTorch, Sklearn, NLTK, Numpy, Pandas, Scipy, OpenCV

Databases: MySQL, PostgreSQL, PL/SQL

Others: Data Modeling, Data Visualization, ETL Pipelining, Data Warehousing