CHAITANYA KRISHNA KOMMINENI

Education

University at Buffalo, The State University of New York

Masters of Science in Data Science

Buffalo, NY Aug 2024-Jan 2025

K L E F Deemed To Be University

Bachelor of Technology

India Jun. 2019 - May. 2023

Technical Skills

Programming: Python, R, SAS, SQL, C++, Java, Shell Scripting, Matlab

ETL Tools: Informatica

Databases: Microsoft SQL Server, MySQL, PostgreSQL, Snowflake, Oracle, BigQuery, Hive, Presto, CosmosDB, NoSQL

Cloud Platforms: AWS, Azure, GCP (BigQuery)

Data Engineering & Big Data: Hadoop, Apache Spark, Hive, Apache Airflow

Data Visualization Tools: Power BI, Tableau, Looker

Development & Al Tools: Jupyter Notebook, Anaconda, VS Code, Jenkins, Git, PyTorch, TensorFlow, R-Studio

Risk Management & Financial Analysis: Anti-Money Laundering (AML), Credit Risk, Operational Risk, Liquidity Risk,

Basel/CCAR Compliance

Data Science & Machine Learning: Predictive Modeling, Hypothesis Testing, Regression Analysis, Logistic Regression,

Ensemble Modeling, Natural Language Processing, Design of Experiments

Data Governance & Quality: Data Governance Policies. Data Quality Assurance. Data Management

Testing & Software Development Lifecycle: System Integration Testing (SIT), User Acceptance Testing (UAT)

Version Control: Git

Mathematical Expertise: Calculus, Numerical Analysis, Statistics, Linear Algebra, Decision Trees

Projects

CRM Data Analysis & Visualization

Spring 2025

- Designed and executed SQL queries to create a structured CRM dataset, integrating user engagement, campaign performance, and channel effectiveness.
- Conducted data analysis in Excel using Pivot Tables, Charts, and Conditional Formatting to visualize engagement trends.
- Developed a data storytelling report summarizing insights and proposing CRM strategy optimizations for improved customer engagement and conversions.

Financial Risk Analysis Dashboard

Fall 2024

- Developed a Power BI dashboard integrated with SQL databases and BigQuery to analyze financial metrics, including credit risk exposure, profit margins, and liquidity.
- Implemented risk models and automated workflows using Apache Airflow, improving data filtering efficiency by 30%.
- Enhanced data storytelling techniques, simplifying insights for non-technical stakeholders and influencing key business decisions.

AML Risk Model Validation Spring 2024

- Validated Anti-Money Laundering (AML) scoring models using Python, SAS, and Spark, ensuring 95% model accuracy and scalability.
- Collaborated with cross-functional teams to refine model validation frameworks and drafted technical documentation for audit compliance.
- Aligned validation outcomes with data governance standards, enhancing model consistency and regulatory reliability.

Formula 1 Data Analysis and Performance Dashboard

Summer 2024

- Developed an interactive Tableau dashboard using SQL and BigQuery to analyze Formula 1 race data and predict performance trends.
- Adapted the project to focus on customer behavior prediction and inventory management in retail applications.

 Automated real-time data processing, reducing manual analytics efforts by 40% and improving business intelligence reporting.

Sales Risk Performance Dashboard

Summer 2024

- Created a Tableau dashboard leveraging SQL and CosmosDB to evaluate sales risks, revenue growth, and product lifecycle trends.
- Provided insights aligned with eCommerce operations, improving inventory accuracy by 20% and customer satisfaction.
- Integrated forecasting workflows using Apache Airflow, enabling real-time scenario planning.

Recommendation System for Research Papers

Fall 2023

- Built an NLP-based recommendation system using Machine Learning to personalize research paper suggestions.
- Applied graph-based algorithms to enhance recommendation precision by 25%.
- Automated data preprocessing, enabling real-time product recommendations in an eCommerce environment.

Cab Booking System Oct 2019

- Developed a cab booking system in Java with real-time updates for improved booking efficiency.
- Integrated database functionality to manage ride tracking, historical data, and driver availability.
- Applied modular development principles for seamless integration with larger eCommerce applications.

Certifications

- Tableau Desktop Specialist Tableau (Issued Mar 2025)
- Java 17 Masterclass Udemy (Issued Sep 2024)
- The Complete SQL Bootcamp: Go from Zero to Hero Udemy (Issued Sep 2024)
- Python for Data Science and Machine Learning Bootcamp Udemy (Issued Jan 2023)
- The Complete Python Bootcamp: From Zero to Hero in Python Udemy (Issued Dec 2022)