

CHAITANYA KRISHNA KOMMINENI

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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 & AI 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)