

KRUTIK BAJARIYA

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PROFESSIONAL EXPERIENCE

COASTAL MEASURES | *Intern - Data Scientist and Software Developer* May 2024 – Dec 2024

- Enhanced data accessibility for the US Army Corps of Engineers by developing an end-to-end ETL pipeline and real-time dashboards using cloud infrastructure, increasing data usability by 37%, enabling better decision-making.
- Saved \$2,000 annually by eliminating reliance on external weather APIs and implementing NOAA Data Model - ERA5 scraping system, ensuring continuous and cost-effective data availability.
- Improved tidal forecasting accuracy by 12% compared to NOAA by developing a Logistic Regression model using weather features, enabling more precise coastal and maritime planning through Tableau.

TCS | *Assistant Systems Engineer - Data Warehouse Executive* Jul 2021 – Jul 2023

- Upgraded fraud detection for FinTech client Aviva Insurance Ireland by leading the "Fraud Claim Detection" Machine Learning project, improving risk management and reducing fraudulent payouts by 7%.
- Refined reporting efficiency by generating 16 quarterly business statistics reports using IBM Cognos & Qlik Sense, enabling data-driven decision-making for business stake-holders.
- Reduced job failures by 8% and ensured 100% compliance by resolving legacy PL/SQL & Unix script failures, improving data integrity for business-critical reports and business analysis.

TECHNICAL SKILLS

Scripting / Programming Languages: Python, C++, Shell Script, PowerShell, Java, PHP, Javascript, MATLAB, R

DataBase Tools & Technologies: SQL Developer (Oracle), MySQL, PL/SQL, DataStage, PostGreSQL, MongoDB

Data Science Libs: Numpy, Pandas, Matplotlib, Seaborn, NLTK, Scikit-learn, Keras, Tensorflow, Pytorch, OpenCV

Cloud Services: AWS (S3, EC2, RDS, Lambda, CloudWatch, API Gateway, VPC, IAM), GCP, Looker

ACADEMIC PROJECTS

Candlestick Pattern Recognition | *Pattern Recognition and Computer Vision* Apr 2025

- Engineered an end-to-end deep learning computer vision solution using YOLOv8 for real-time candlestick pattern recognition, automating the detection of over 6 key trading patterns (e.g., Doji, Hammer, Engulfing). This enabled faster, data-driven trading strategies and reduced human error in technical analysis workflows.
- Optimized financial chart analysis by integrating our model into trading pipelines, cutting manual inspection time by 80% and significantly boosting decision-making speed for traders and analysts through pattern-based alerts.

Remo Data Analysis | *Data Management and Preprocessing* Aug 2024

- Formulated a clustering model using *K-means* and *t-SNE* on a dataset of over 72,000 books, successfully grouping books into 4 distinct genres. Achieved 95% data completeness by resolving missing values using imputation and external sources.
- Established a data pipeline for book metadata, binarizing multi-label genres with *MultiLabelBinarizer*. Enhanced clustering performance by reducing data redundancy, cleaning 3,898 records, and achieving clear separations in visualized clusters.

EDUCATION

Northeastern University Jun 2025

Master of Science in Computer Science GPA: 4.0 / 4

University of Mumbai Jun 2021

Bachelor of Engineering in Information Technology GPA: 8.45 / 10