

# Adhyan Ahuja

## Data Scientist

📍 Hyderabad, India    ✉ adhyanahuja17@gmail.com    ☎ +91-9881401378    in [linkedin.com/in/adhyanahuja10](https://www.linkedin.com/in/adhyanahuja10)

## Professional Summary

Data Scientist with 2 years of experience in Analytics, Applied ML, and GenAI-driven solutions. Currently working at D. E. Shaw, supporting NY head-office stakeholders through scalable data products, automated reporting, and insight generation. Strong foundation in Data Science and Mathematics with specialized focus on ML and Statistical Modeling.

## Education

### Birla Institute of Technology and Science, Pilani

Aug 2019 – Jun 2024

B.E. in Electrical and Electronics Engineering, M.Sc. in Mathematics; Minor in Data Science

**GPA: 8.44/10**

- **Key Achievements:** Led 10+ events as Mathematics Association coordinator, boosting participation through data-driven strategies; Campus Ambassador for AAROHAN IQ exam, successfully attracting 1,200+ participants.
- **Relevant Coursework:** Foundations of Data Science, Machine Learning, Deep Learning, Applied Statistical Methods

### Delhi Public School, Pune

Graduated: May 2019

Class 10: CGPA 10.0/10, Class 12: 94.2%

## Professional Experience

### Specialist - Global Analytics & Reporting | D. E. Shaw India Private Limited | Hyderabad, India

Dec 2025 – Present

- **Automated Reporting Pipelines:** Automated recurring reporting workflows using SQL and Python, replacing manual and ad-hoc analyses and improving reporting turnaround time for hiring and learning analytics use cases.
- **Job Recommendation Tool:** Contributed to the development of an NLP-driven job recommendation tool leveraging resume and job description text similarity, supporting improved role matching and reducing manual screening effort.
- **Analytics Dashboards Development:** Built interactive dashboards to track key hiring and learning metrics, enabling stakeholders to self-serve insights and reducing dependency on manual data pulls.

### Data Scientist | Piramal Finance | Bengaluru, India

Sept 2024 – Dec 2025

- **Intelligent Document Processing Automation:** Automated document classification, data extraction, and validation using Azure OCR, YOLOv10, and LLMs, reducing manual effort from 22,000 hours/month to < 1 hour and costs by 60%.
- **AI Pipeline Engineering:** Built scalable, reusable AI solutions integrating CV, NLP, RAG, and reinforcement learning, delivering 99%+ accuracy and significant latency reduction across business processes.
- **Agentic AI tool for Script Generation:** Built “Samvaad”, an agentic AI framework using LangGraph & LangChain to generate hyper-personalized customer care scripts. Integrated semantic memory from ChromaDB and episodic memory from Snowflake via fusion agents to craft dynamic, context-aware prompts using gpt 4o-mini for customer care reps.
- **Conversational AI for Business Intelligence:** Engineered a GPT-4o-powered transcript analysis pipeline uncovering repeat-call root causes, optimizing loan conversions through agent behavior insights, and refining discount strategies — improving operational efficiency by 35% and driving significant incremental business.
- **Customer Feature Store:** Designed and implemented a customer feature store consolidating 200+ features from multi-source call and SR data, including 1/3/6-month interaction histories and AI-derived call behavior insights, to power downstream analytics and ML models.
- **Business Insights Dashboard:** Built a GenAI-powered dashboard using Power BI, driving 50% increase in adoption by delivering actionable, parametric insights across Sourcing, Portfolio, Network, and Cross-Sell for business heads.
- **A/B Testing for SUD Conversion:** Led causal AB tests using advanced matching and statistical validation (Hotelling's  $T^2$ , chi-square), providing data-driven recommendations that improved loan disbursement efficiency.

### Risk Analytics Intern | Piramal Finance | Bengaluru, India

Jan 2024 – Jun 2024

- **Fraud Detection Model:** Deployed XGBoost model achieving AUC-ROC of 0.75 with 70%+ fraud capture rate, preventing \$1.2M in potential losses.
- **Data Pipeline Management:** Orchestrated end-to-end data pipeline including EDA, preprocessing, and feature engineering, achieving Kolmogorov-Smirnov statistic of 41 for risk segmentation analytics.

- **Sales Analytics:** Analyzed critical KPIs for underperforming stores in Personal Care Division using Factor Analysis to identify improvement opportunities.
- **Predictive Modeling:** Built regression model for sales target optimization across 1,000+ locations, improving target achievement by 25% and overall productivity by 10%.

**ML Research Intern | CSIR | Pilani, India**

May 2021 – July 2021

- **Predictive Modeling:** Developed ML model for water leak prediction with 95% accuracy across various scenarios.
- **Dataset Creation:** Generated comprehensive dataset of 990 leak simulation scenarios for robust model training, supporting water conservation initiatives through predictive maintenance solutions.

## Key Projects

**License Plate Detection and Recognition System**

Jan 2023 – May 2023

- Developed end-to-end ALPR system using CNN architecture trained on 43,200 images, achieving 85% accuracy.
- Implemented advanced image processing pipeline using OpenCV for skew-correction and character segmentation.

**Earthquake Prediction using Statistical Analysis**

Mar 2021 – May 2021

- Applied statistical modeling for earthquake prediction using natural time and inter-event analysis, fitting data to Gamma Distribution using Maximum Likelihood Estimation and validated with Kolmogorov-Smirnov test.
- **Results:** Calculated Earthquake Potential Scores of 44.88% (Taipei) and 54.07% (Tainan).

## Technical Skills

**Programming & Data:** Python, SQL, GraphQL R, MATLAB, Statistical Modeling, A/B Testing**Machine Learning:** XGBoost, LangGraph, LangChain, TensorFlow, PyTorch, Panel, Scikit-Learn, Keras, NumPy, Pandas**AI/LLM:** GPT-4o, Multimodal LLMs, NLP, RAG Frameworks, Prompt Engineering**Computer Vision:** YOLO, OpenCV, Image Processing, Feature Extraction**Cloud & Tools:** AWS Glue, Snowflake, MS SQL Server, Batch, Git, GitHub, CI/CD Pipeline, Power BI, Streamlit**Business:** Stakeholder Management, Data Visualization, Advanced Excel, Project Management

## Publications

**An Adaptive Double Threshold Three Event Energy Detection Scheme for Cognitive Radio Network, Springer***9th International Conference on Information and Communication Technology for Intelligent Systems, Bangkok, Apr 2025***Comparative Study on Spectrum Sensing and Modulation Techniques in Cognitive Radio Network, IEEE***2nd International Conference on Advanced Computing and Communication Technologies, Delhi, Nov 2024*

## Awards and Recognitions

**Certificate of Appreciation for Smart Coupon Use Project | Piramal Finance**

May 2025

- Selected as 1 of 180 employees to receive a Certificate of Appreciation from the Chief Data & Analytics Officer at Piramal Finance for leveraging Generative AI to extract actionable insights from call transcripts, preventing coupon misuse.

**Recognition for Australian National Chemistry Quiz | Royal Australian Chemical Institute**

Jul 2018

- 1 out of 7 students to receive a certificate of distinction in the Australian National Chemistry Quiz.

**Scholar Badge Holder | Two Consecutive Years | Delhi Public School Pune**

Jul 2017

- 1 out of 15 students to receive Scholar Badge for academic excellence from DPS Pune in 9th and 10th grade.

## Certifications

1. **Cloud Digital Leader | Google Cloud**2. **The Data Scientist's Toolbox | Johns Hopkins University**3. **Machine Learning for All | University of London**4. **Generative AI Workshop on Bedrock | Amazon Web Services**

## Extra Curricular Activities

**Hobbies & Interests**

Ukulele • Pickleball • Football • Sudoku • Photography • Traveling • Investing