

RUDRA MEHUL DUDHAT

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[LinkedIn](#) | [GitHub](#)

Education

Indian Institute of Technology, Bhilai Jul 2024 – May 2028
Bachelor of Technology — Data Science & Artificial Intelligence
CGPA: **9.48/10** | JEE Advanced Rank: **10,463** | Deputy Class Representative

Reliance Foundation School, Koparkhairane Sep 2022 – Apr 2024
CBSE Class XII: **96%** (Rank 3 in Science Stream) | Physics, Chemistry, Mathematics, Computer Science

Featured Project

OptiQuant: AI-Driven Quantitative Trading Platform Jul 2025

- Generated **161%** returns with a **2.73** Sharpe ratio over **272** trading days using ensemble ML (LightGBM, Random Forest, CatBoost).
- Achieved **64%** win rate and **56%** Precision@Top 1% via advanced time-series feature engineering and robust walk-forward validation.
- Deployed production system on AWS EC2 with Docker and automated CI/CD (GitHub Actions); monitoring and rollbacks enabled.
- Built a Streamlit interface with SHAP explainability for transparent model insights and backtesting validation.
- Tech:** Python, Pandas, NumPy, Scikit-learn, LightGBM, Random Forest, CatBoost, AWS, Docker, GitHub Actions.
- [Live Demo](#) | [GitHub](#)

Technical Skills

Programming: Python, Java, C, SQL
ML & Data Science: Scikit-learn, TensorFlow, PyTorch, Pandas, NumPy, SHAP, Feature Engineering
LLM & GenAI: Hugging Face Transformers, LangChain, RAG, Prompt Engineering, OpenAI API, Ollama
Cloud & DevOps: AWS (EC2, Elastic Beanstalk), Docker, Git, GitHub Actions, CI/CD Pipelines
Web: Flask, Streamlit, Gradio
Statistics: Time-Series Analysis, Hypothesis Testing, Bayesian Inference, PCA, Regularization

Additional Projects

FIFA Player Valuation Model with SHAP Interpretability May 2025

- Architected a Random Forest model to predict market values with $R^2 = 0.9$; engineered 20+ features; applied leakage-safe cross-validation.
- Implemented SHAP for global & local explainability to quantify feature impact and model trust.

Leadership & Experience

Core Member, Data Science & Artificial Intelligence Club, IIT Bhilai Jul 2025 – Present

- Led a 12-member team to organize industry expert sessions for 200+ students; coordinated workshops on AI, Generative AI, and Quantitative Finance with 100+ participants.

Student Placement Volunteer (CCPS), IIT Bhilai Jul 2025 – Present

- Managed recruitment coordination for 15+ companies; supported placement drives serving 100+ students and maintained a professional candidate experience.

Certifications

Complete Data Science, ML, DL, NLP Bootcamp — Krish Naik, Udemy Aug 2025
BCG Data Science Job Simulation — Forage: Customer churn prediction with **50%** recall Jun 2025
JPMorgan Quantitative Research Virtual Program — Forage: Loan default prediction Jun 2025