

SKILLS

- **Languages:** Python, R, SQL (MySQL), DAX.
- **Machine Learning & AI:** XGBoost, Scikit-learn, NLP, LSTM, Predictive Modeling
- **Libraries & APIs:** Pandas, NumPy, Flask, FastAPI, SQLAlchemy, Streamlit, Matplotlib, Plotly
- **Data Visualization & BI:** Power BI, Tableau, Microsoft Excel (Power Query, Advanced Pivot Tables)
- **Data Engineering & Cloud:** AWS (S3, Athena, Glue), Azure (Synapse, Data Factory), Databricks, Git, ETL Pipelines
- **Database Concepts:** Relational Data Modeling, Advanced SQL (CTEs, Multi-Table Joins, Stored Procedures)

KEY PROJECTS

Dubai Real Estate Automated Valuation & Opportunity Detection [\[Link\]](#)

- Built an end-to-end **Dubai real-estate AVM** using **XGBoost**, combining property characteristics with 90-day area/project comparable-sales features, achieving **R^2 0.89, AED 215K MAE and 6.24% MAE** on held-out data.
- Developed a **forward 30-day opportunity backtest** and high-confidence pricing-dislocation signal; the Conservative signal delivered **46.69% median forward return and 100% positive-rate** across 35 historical observations.
- Developed a **Streamlit** broker-facing valuation tool that converts property inputs into estimated market value and AED/sqft, translating the analytical model into a practical real-estate decision-support application.

Live Quantitative Risk Engine & Portfolio Optimizer [\[Link\]](#)

- Engineered an automated **ETL pipeline** in R to extract live stock market data via **Yahoo Finance APIs**, eliminating the use of static CSVs and reducing data latency to zero.
- Executed a 10,000-run Monte Carlo simulation to map the Markowitz Efficient Frontier, identifying a Maximum Sharpe Ratio (2.37) portfolio that projected an **86.7% annual return** while capping risk at 36.6%.
- Designed an interactive **Tableau** dashboard to visualize cumulative asset growth and volatility, translating complex Modern Portfolio Theory (MPT) mathematics into actionable insights for executive stakeholders.

European Football Transfer Market Inflation & Demographics Analysis (2014–2024) [\[Link\]](#)

- Standardized and cleansed **3,591 verified transfer records** across 11 seasons in **Excel**, utilizing **Power Query** for schema hygiene and constructing custom **DAX** calculated columns to model market behavior.
- Quantified a **119.8% 10-year market fee inflation rate** (€6.12M to €13.45M) and isolated major economic distortions, including a 1.49x "Premier League Tax" and a 2.27x "Youth Premium" on U21 prospects.
- Built an interactive 3-page **Power BI dashboard** with conditional heatmaps and scatter plots, translating complex demographic data into actionable capital allocation strategies for buying and selling clubs.

EDUCATION

B.Sc. (Hons) Computer Science, Minor in Mathematics - Central University of Karnataka

2022 - 2026

- Relevant Coursework: DBMS, Artificial Intelligence, Machine Learning, Digital Image Processing.
- Two-time Team Lead & Official Institute Nominee, Smart India Hackathon (SIH)

PROFESSIONAL EXPERIENCE

AI/ML Intern | UptoSkills (Remote) | Jan 2025 – Apr 2025

- Engineered data pipelines to extract, structure, and log raw conversational data into MongoDB, creating a clean, query-ready database for downstream analytics and model retraining.
- Analyzed user query logs and evaluated model outputs against real-world usage data, tracking statistical accuracy and identifying error patterns to optimize intent-routing rules.
- Monitored daily system validation metrics and reported findings during Agile stand-ups, effectively translating technical performance data into actionable updates for cross-functional stakeholders.

AI/ML Intern | NativeSoftTech (Remote, Project-Based) | Jan 2025 – Mar 2025

- Processed and analyzed highly unstructured university admission queries, engineering text-tokenization features to transform raw text into structured datasets for predictive modeling.
- Evaluated analytical model performance using confusion matrices, achieving 90% validation accuracy and a 0.95 F1-score, and presented the results through clear, non-technical evaluation summaries.

CERTIFICATION:

- Career Essentials in Data Analysis (Microsoft & LinkedIn)
- Artificial Intelligence Primer Certification (Infosys SpringBoard)

LANGUAGES: English (Fluent), Malayalam (Native), Hindi (Professional), Arabic (Elementary), Spanish (Elementary)