Sahil Raj

EDUCATION

National Institute of Technology, Karnataka

2022 - 2026

Bachelors of Technology - Mining Engineering

Manglore, Karnataka

TECHNICAL SKILLS

Programming & Analytics: Python, SQL, Excel, Power BI, JAVA

Tools & Platforms: Azure Data Factory, Databricks, Azure Synapse, MLflow, ZenML, Git

PROJECTS

Production-Ready House Price Prediction (MLOps)

Jun 2025 – Jul 2025

Technologies: ZenML, MLflow, Python, Scikit-learn, Pandas, REST API, CI/CD, Git

- Developed a modular MLOps pipeline using ZenML for automated data ingestion, transformation, training, and deployment of a house price prediction model with 97.3% accuracy.
- Deployed models via REST APIs with real-time inference support and tracked 25+ experiments using MLflow for reproducibility and version control.
- Applied Factory, Strategy, and Template design patterns to ensure scalable, maintainable, and production-ready code.

Azure Data Engineering Pipeline

Jan 2025 - Feb 2025

Technologies: Azure Data Factory, Azure Data Lake Gen2, Databricks,

Azure Synapse Analytics, SQL, Power BI, Spark

- Designed a production-grade pipeline using **Medallion Architecture** (Bronze-Silver-Gold) to process **1M+ records**, reducing ingestion time by **35**% via **ADF** optimizations.
- Cleaned and transformed large datasets using **Databricks PySpark**, then loaded into **Azure Synapse** and exposed via external tables for analytics and reporting.
- Created dynamic Power BI dashboards from Synapse views, enabling live KPI insights across 3+ business units.

EXPERIENCE

Lyik (Startup) Business Analyst Intern

Dec 2024 - Jan 2025

- Automated web scraping workflows using Python and Beautiful Soup, reducing data collection time by 40% across key market sources.
- Performed detailed **competitor analysis** and created strategic benchmarks, identifying gaps in **market positioning** and **customer targeting**.
- Designed and deployed 5 SQL-based dashboards in PowerBI, improving stakeholder reporting and increasing user engagement by 15%.

CCL (Coal India) - Ranchi

Apr 2024 - May 2024

Management Trainee

- Analyzed production workflows and resolved process bottlenecks, increasing operational throughput by 15%.
- Mapped underground operations via Excel-based time-motion studies, improving ore extraction efficiency by 8% and reducing idle time by 12%.
- Conducted **cost-benefit analysis** and assisted with budgeting strategies, contributing to a **10% reduction** in non-operational costs while maintaining **safety compliance**.

EXTRACURRICULAR

- TechSaksham Internship (Microsoft & SAP CSR): Completed certified AI internship focused on real-world applications and problem-solving using Python and AI tools. [Certificate Link]
- Leadership Roles SAE HR Coordinator & NITK Basketball Team: Led HR operations for a 30+ member SAE team, increasing retention by 20%. Represented NITK in intercollegiate basketball, demonstrating teamwork and discipline.