SHUBHAM JAIN

Bengaluru, KA | shubhamajay2@gmail.com | +91 7096211133 | LinkedIn

SUMMARY

Forward Deployed Engineer building production agentic AI and prescriptive ML for heavy manufacturing, embedded with plant operators and owning delivery from problem scoping to production: supervisor-agent systems with RAG and memory, multi-horizon forecasting with optimization, and conversational data apps deployed in a legacy alumina plant. Full-lifecycle owner, from model design and MLOps governance to delivery for operators and leadership.

CORE SKILLS

GenAI & Agentic AI	Supervisor/Multi-Agent Orchestration, Intent Classification & Tool Routing, RAG, Databricks Genie Spaces, Session/Long-Term Memory (Lakebase), SLM Fine-Tuning, Prompt Engineering, LLM Evaluation, LangChain, LangGraph, Semantic Search
Machine Learning	Multi-Horizon Forecasting (LightGBM, XGBoost), Spatiotemporal Modeling, Feature Engineering, Causal Inference (DoubleML), Explainability (SHAP), A/B Testing, MLOps Governance (Champion/Challenger, MLflow)
Optimization & Simulation	Genetic Algorithms, Particle Swarm Optimization, Prescriptive Analytics, Digital Twins, Constraint Optimization
Languages & Data	Python (Pandas, NumPy, Scikit-learn, PyTorch), SQL, PySpark, PostgreSQL, OPC UA
Platforms & Delivery	Databricks (Apps: Streamlit/React), Azure DevOps (Git, CI), AWS, Power BI

PROFESSIONAL EXPERIENCE

Aditya Birla Management Corporation — Group Data & Analytics Bengaluru, KA

Forward Deployed Engineer Jan 2026 – Present

- Embedded with plant operators for weeks at a legacy alumina plant to scope the problem on the ground, then led the analytics layer of a calcination digital twin end to end, fusing high-frequency sensor data with ML models for simulation-based optimization across production, quality, and energy trade-offs; operators now use it daily.
- Architected and deployed a supervisor-agent AI system with intent classification and tool routing across RAG (Databricks Vector Search), Genie Spaces, and model endpoints, backed by session and long-term memory on Lakebase; replaced manual analyst intervention in plant decision workflows and adds 400 hours/year of first-time-right production.
- Designed and shipped a Databricks App (Streamlit/React) for plant teams to query process data conversationally, with role-based operator and leadership views, a KPI hierarchy (FTR, throughput), optimization prescriptions, alerting, and data-quality pages.
- Sole owner of the stakeholder chain from plant operator to CEO: translated operator needs into build requirements, reported outcomes and shortcomings to leadership, and owned adoption after go-live.

Management Trainee, Data Scientist Jul 2025 – Jan 2026

- Built a multi-horizon forecasting and prescriptive optimization engine for Specific Surface Area (SSA) in calcination, pairing LightGBM forecasts with GA/PSO search and DoubleML causal estimates, with prescription-vs-actual tracking to raise first-time-right (FTR).
- Designed, trained, and deployed an LLM-SLM-XGBoost hybrid for insurance claims fraud detection end-to-end: 18% accuracy uplift and 40% reduction in manual processing time.
- Built a spatiotemporal ML model for early disease hotspot detection through geospatial/time-series feature engineering, delivering multi-week risk forecasts that generated Rs. 5M+ in business value.

Data and Analytics Trainee Jan 2025 – Jun 2025

- Fine-tuned a small language model (SLM) on plant terminology and data structures for domain-specific operations queries, enabling lightweight, low-latency deployment.
- Built an OPC UA connector streaming live sensor data from 4+ manufacturing lines into PostgreSQL via Databricks/PySpark pipelines, with CI on Azure DevOps under MLOps best practices.

Business Analyst Intern — Fractal Analytics, Bengaluru, KA May 2024 – Jul 2024

- Translated B2B campaign data into predictive and clustering models with client stakeholders, driving a 10% lift in lead conversion for a high-value cohort.
- Designed and ran A/B tests to isolate high-impact customer segments and optimize engagement across multiple touchpoints.

EDUCATION

B.Tech, Data Science, Economics & Business — Plaksha University Aug 2021 – Jul 2025

CGPA: 9.0 / 10

CERTIFICATIONS & ACHIEVEMENTS

- **Databricks Certified Generative AI Engineer Associate** (Jun 2026)
- **GDNA Hackathon 2026 Winner:** built an NL2SQL agent enabling business teams to query data conversationally
- **VMart Undergraduate Scholarship:** Top 1% of cohort
- **Speechcrafter,** Toastmasters International (2025)