JARED MAHOTIERE

Jared Mahotiere | Bear, DE | (302) 803-7673 | jmahotie@purdue.edu | LinkedIn: linkedin.com/in/jared-mahotiere | GitHub: github.com/jmahotiedu | Site: jmahotiedu.github.io

SUMMARY

Analyst/Associate candidate for US Equity and Quantitative Strategy Research with model-driven forecasting, SQL/Python analysis, and clear research communication across cross-functional stakeholders.

EDUCATION

Purdue University - B.S. Electrical Engineering Technology (Computer Engineering Technology)
Minor: Computer & IT | Certificate: Entrepreneurship & Innovation | Expected May 2026

LEADERSHIP & ORGANIZATIONS

Delta Tau Delta (Campus Chapter): DEI Chair | **National Society of Black Engineers (NSBE):** Member

SKILLS

Analysis: Python, SQL, Excel, PowerPoint, Word | Quant Methods: forecasting, feature engineering, time-series analysis, anomaly detection, model evaluation | Data: pandas, scikit-learn, XGBoost, Prophet, PySpark, Airflow, Kafka | Datastores/Infra: PostgreSQL, SQL Server, Redis, AWS, Docker, GitHub Actions | Communication: research writing, stakeholder presentations, cross-functional reporting

EXPERIENCE

Nucor Corporation - Software/Automation Engineering Intern | Darlington, SC | May-Aug 2024 and May-Aug 2025

- Developed and tuned Oracle QMOS + SQL Server query workflows (multi-table joins, priority logic) used by quality, sales, shipping, and mill operations.
- Implemented Quartz.NET automation for weekly hold/priority reports to 4 departments (Mill 1, Mill 2, Saw Cut, Scrap), replacing manual report distribution.
- Led cross-functional validation and rollout planning (test cases, sign-offs, punch-list closure) with operations, maintenance, quality, sales, and shipping for on-time delivery.
- Built the Hold Disposition Management system in Blazor Server (Telerik UI), integrating Oracle QMOS with a SQL Server-backed priority system to centralize hold-status decisions.

PROJECTS

Retail Sales Forecasting Research Stack - Python, XGBoost, Prophet, FastAPI

Links: GitHub: github.com/jmahotiedu/retail-forecast-dashboard, Live: retail-forecast-alb-104304097.us-east-1.elb.amazonaws.com

- Built store-level forecasting and scenario analysis across 1,115 stores; achieved XGBoost R2=0.91 and 11% MAPE with reproducible evaluation and 90%+ automated test coverage.

Signal & Indicator Pipeline - Kafka, PySpark, Airflow, SQL

Links: GitHub: github.com/jmahotiedu/streaming-etl-pipeline, Architecture: github.com/jmahotiedu/streaming-etl-pipeline/blob/main/docs/ARCHITECTURE.md

- Engineered 100+ events/sec pipeline with watermarking, checkpoint recovery, and windowed aggregations to produce reliable trend/anomaly indicators for downstream dashboards.

workflow-orchestrator - TypeScript, Redis Streams, Postgres

Links: GitHub: github.com/jmahotiedu/workflow-orchestrator, Live: workflow-orc-demo-alb-1577468805.us-east-1.elb.amazonaws.com

- Designed deterministic run tracking with idempotent retries and durable task state; benchmarked 25/25 successful runs in 15.94s for repeatable research-style batch workflows.

OPEN SOURCE CONTRIBUTIONS

- Bloomberg comdb2 (Java): fixed JDBC metadata cursor isolation to prevent getTables() result-set invalidation during version lookup (PR #5731).
- Bloomberg comdb2 (C/C++/SQL): backported targeted SQLite security fixes and validated with a source-build harness matrix (PR #5743).
- Cross-repo PR history (PicoClaw + Bloomberg): https://github.com/pulls?q=is%3Apr+author%3Ajmahotiedu+org%3Asipeed+org%3Abloomberg.