JASON BIAN

734-730-6569 | jason.bian75@gmail.com | LinkedIn | GitHub | New York, NY

Work Experience

Amazon.com — Supply Chain Optimization Technologies
New York, NY

Data Platform Engineer II — May 2023 – Present

Supported Project — Gen-QOT (Andaz et al., 2024)

- Built and maintained a low-latency data platform used to generate inventory purchasing decisions via trained RL policies.
- Developed RL inference pipelines for inventory purchasing decisions with active buying actions against 15% of US Retail.
- Maintained state machine orchestration (using Scala and Spark), feature-store storage (model outputs, input layer) and on-call workflows for RL runtimes.

Supported Project — Coherent Probabilistic Hierarchical Neural Forecaster — CLOVER (Olivares et al., 2024)

- Defined temporal, legal, and lifecycle requirements with 20+ software and data science partner teams.
- Expanded the existing feature set to support real-time expected shipment dates for 90% of US Retail, reducing audit and risk workflows on generated predictions by 75%.
- Scaled daily vending API calls from 150 to 630 over 6 months and expanded the existing service response data model to include purchase_order and profitability data domains.
- Provided 24/7 Sev-2 support for streaming and batch execution of 6 core hierarchical forecasting models using the CLOVER framework (1,100+ execution_ids at zip, merchant, ASIN, and regional aggregations).
- Maintained a yearly PR count of ∼155 across 26 packages with 2.3 avg revisions.

Amazon.com — Worldwide Sustainability
Seattle, WA

Data Engineer II — Jun 2022 – Present

- Supported inventory transfer decisions targeting ∼1.5% of US total emissions via the amazon.com green shipping button with ∼524K ktons of fulfillment network carbon abatement in 2023 (2023 Sustainability Report).
- Increased high-specificity emission availability from 45% to 77%, carbon asset entity resolution from 33% to 90%, and item-level availability guarantees from 81.3% to 97.3% of US Retail via repartitioning, regionalization, and access pattern optimization on ∼35.3B events per day.
- Grew internal usage from 27 to 55 teams during tenure, supported the amazon.com green checkout page as a customer.

Microsoft — Azure Decision Science
Redmond, WA

Program Manager — Jan 2020 – Aug 2021

- Developed the demand arm of Microsoft's multi-echelon capacity management strategy; managed buying plans for Azure data-center compute with ∼$55M of monthly demand sensitivity.
- Improved offer restriction and quota management model coverage from 30% to 45% of Azure services; built CVP-level analytics for monthly capacity reviews.

OptimChain
Ann Arbor, MI

Founder — Jan 2020 – Dec 2022

- Founded consulting shop for Azure cloud migrations and supply chain solutions; acquired $45K revenue in 3 months and saved 1,800 hours of manual labor across all client projects (Framework).
- Managed contract negotiation, RFPs, and a team of 7 (3 US-based, 4 offshore) across ∼7 engagements.

Skills

Languages: Java, Python, Scala

Frameworks: Frontend (typescript, react, javascript), Infra (linux, typescript, cdk), Data (spark/pyspark, pytorch, airflow, numpy), LLM (conductor, claude code, mcp, response caches)

Infrastructure: AWS (emr, glue, s3, dynamodb, redshift, kinesis, sns, mq, ec2, sagemaker, step functions, lambda), Apache (livy, hazelcast, presto, beam, flink, avro, iceberg), Databricks (delta lake, managed mlflow, parquet), Temporal, Git Actions

Production ML: Reinforcement Learning, Deep Learning, Hierarchical Forecasting, ARIMA, Stochastic/Convex Optimization, Multivariate Regression, Linear/Integer Programming, Monte Carlo Simulation, Experimental Design, R

Education

University of Texas at Austin — Expected Dec 2025
M.S. Computer Science — GPA: 3.69

University of Michigan, Ann Arbor — Dec 2019
B.S.E. Industrial and Operations Engineering — Major GPA: 3.83

Projects

Riot Match History Classifier: Guest lecture on League of Legends API extraction and decision tree classification for INFO SYS 201 (University of Washington)

2019 Ford Transit Camper Van: House-van construction (listing), power management, and Li-Fo battery optimization