Nishtha Wagh

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Professional Summary

Senior Data Scientist with 4+ years shipping production ML systems and owning end-to-end analytics, from ambiguous problem to deployed solution driving measurable business impact.

Work Authorization: F-1 OPT (current) + STEM OPT valid to 2028 (no sponsorship required short term); Open to relocation

Technologies

Experimentation & Analytics: A/B Testing, Hypothesis Testing, Causal Inference, Metric Design, Funnel Analysis, Cohort Analysis

Machine Learning: Propensity Modeling, Predictive Models, XGBoost, Gradient Boosting, Logistic Regression, Segmentation

Programming & Platforms: Python, SQL, PySpark, R, AWS (SageMaker, Redshift, S3), GCP (BigQuery, Cloud Run)

Analytics & NLP: BERT, Topic Modeling, Sentiment Analysis, Behavioral Analytics

Visualization & BI: Power BI, Tableau, Looker

Production & Tooling: Model Monitoring, CI/CD, Docker, Git, Jenkins

Work Experience

DATA SCIENTIST, ASU Enterprise Partners, Arizona, United States — Mar 2024 – Present

- Designed and executed **A/B test** on personalized email content across **50K+ alumni**, defining success metrics (CTR, conversion rate) and achieving **7% lift in registrations**.
- Built segmentation models identifying high-value alumni cohorts based on engagement patterns for annual personalization strategy and campaign prioritization.
- Built **Power BI dashboards** tracking email → registration → donation funnels, enabling optimization of outreach strategies across alumni engagement teams.
- Analyzed **2,200+ alumni narratives** using topic modeling to identify content preferences and sentiment drivers for personalization strategy.
- Deployed sentiment analysis pipeline on **GCP Cloud Run** processing **20K+ weekly responses**, reducing analysis time from **weeks to hours**.

SENIOR DATA SCIENTIST, Amazon India (via Axio), India — May 2022 – June 2023

- Built customer segmentation models across risk cohorts for credit line expansion, supporting targeted offer strategy that contributed to portfolio growth.
- Developed cross-sell propensity models and targeting recommendations that improved campaign performance, supporting user base expansion.
- Built and deployed **risk scoring models** on **AWS SageMaker** serving **500K+ daily decisions**, enabling scalable credit evaluation.
- Led data quality investigation across **5M+ user records**, identifying scoring inconsistencies; drove **12% improvement** in model reliability, presented to **VP of Risk**.
- Built **model monitoring framework** tracking **200+ features**, defining alerting thresholds for detecting population shifts.
- Optimized feature pipeline in **Redshift**, reducing refresh cycles by ~**95% (8 hours to 25 mins)**, enabling daily model updates.

DATA SCIENTIST, Amazon India (via Axio), India — Jan 2021 – May 2022

- Designed and analyzed experiments on cross-sell campaigns, defining test hypotheses and success criteria, optimizing targeting that improved response rates.
- Built analytics dashboards tracking user engagement and portfolio metrics for **20+ stakeholders** across Product, Risk, and Finance.
- Deployed **risk models** on **AWS SageMaker** supporting credit decisions for **2M+ users (AUC 0.78)**, enabling scalable evaluation.
- Developed behavioral features from transaction and repayment patterns, enabling segmentation that informed product targeting.
- Built automated evaluation pipeline processing **300K+ daily decisions**, reducing manual review requirements.

Education

Arizona State University, USA, Master of Science in Data Science; **GPA: 3.90** — Aug 2023 – May 2025

Nirma University, India, Bachelor of Technology in Computer Engineering; **GPA: 3.46** — Aug 2017 – Jun 2021