

Hollis Cuffie

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Summary

Senior Data Scientist with 5+ years driving high-impact analytics and experimentation in retail and consumer marketplaces.

Expert in causal inference, incrementality measurement, large-scale A/B testing, uplift modeling, and simulation to quantify trade-offs and optimize growth. Own end-to-end analytical frameworks that shape product roadmaps, prioritize investments, and deliver tens of millions in incremental lift/revenue. Skilled at translating behavioral and marketplace data into actionable leadership insights and partnering cross-functionally with Product and Engineering to scale experimentation and data-driven decisions.

Professional Experience

Procter & Gamble – Senior Data Scientist

Cincinnati, OH | 07/2024 – Present

- Owned and evolved enterprise ML decision platform integrating geospatial, demographic, behavioral, and syndicated sales data to prioritize retail investment and optimize national account growth; platform influences \$300M+ in annual revenue decisions.
- Re-architected core production models, replacing legacy ensemble components with XGBoost + full SHAP interpretability; lifted AUC from 0.84 → 0.89 (+5 pts), unlocking \$50M in incremental business impact and minimizing false-prioritization risk.
- Designed scalable causal inference and forecasting frameworks to estimate incremental lift in sparse/heterogeneous data environments; captured \$20M in whitespace opportunities.
- Developed and deployed production RAG knowledge assistant consolidating documentation, model logic, and analytical outputs; reduced internal exploration time 50–60% and boosted adoption.
- Built simulation and experimentation systems evaluating trade-offs in assortment, conversion, and distribution scenarios; cut time-to-insight by 40%.
- Analyzed large-scale mobile device data to model geographic mobility and shopping behavior; enhanced trade-area precision and downstream targeting accuracy for major retail partners.
- Established model-agnostic monitoring, regression testing, and validation standards across regions to guarantee reproducibility, stability, and interpretability in production.
- Mentored analysts and led training for cross-functional teams on experimentation design, ML interpretability, and production validation; elevated enterprise modeling rigor.

Procter & Gamble – Embedded Lead Data Scientist

Cincinnati, OH | 08/2022 – 07/2024

- Led market-scale causal experimentation across 20+ algorithmic pacing and allocation deployments, synthesizing behavioral insights to guide durable investment strategy and generating \$4.7M in efficiency gains.
- Developed and deployed P&G's inaugural Multicultural GenAI LLM application, unifying 1P/3P data to accelerate insights on underserved consumer segments; improved response accuracy from 64% → 84% through structured evaluation pipelines.
- Built scalable LLM observability and evaluation tooling (multi-metric validation, hallucination checks, regression testing), prompt-engineering standards and governance practices to ensure reproducibility across model versions; championed cross-functional adoption through demos, training, and use-case enablement.
- Optimized cross-media reach measurement and linear TV forecasting by refining reach curve models, deduplicating audience signals across linear, programmatic, and social channels, and implementing actuals-feedback validation frameworks; contributed to 5-7% global media efficiencies and recognition as a finalist for innovation.
- Partnered broadly with stakeholders to embed analytics into product workflows, led knowledge transfer and training initiatives, and contributed to org-building activities that elevated analytic literacy and adoption of data-driven decisions.

Procter & Gamble – Analytics & Insights Manager

Cincinnati, OH | 08/2020 – 08/2022

- Owned end-to-end product analytics and measurement for P&G Beauty's iOS app, defining and evolving KPIs across acquisition,

activation, engagement, retention, and conversion; partnered with Product and Engineering to ensure robust instrumentation, data integrity, and experiment-readiness.

- Designed and analyzed A/B tests across onboarding and feature launches accounting for delayed effects and behavioral carryover; driving +80% profile completion and 2x increases in multi-product engagement.
- Built individual-level behavioral cohorts and lifecycle personas from large-scale clickstream data, linking persistent cross-session behavior to downstream engagement, retention, and spend to inform personalization and roadmap decisions.
- Led KPI governance and executive reporting, delivering weekly and monthly readouts used by senior leadership to evaluate tradeoffs, prioritize investments, and assess ROI across product and media initiatives.
- Translated complex behavioral analyses into clear, actionable narratives for cross-functional stakeholders, shaping product roadmaps and growth strategies across flagship Beauty brands (Olay, SK-II, Pantene).
- Scaled first-party data activation by integrating app data into enterprise platforms, enabling consistent experimentation, audience targeting, and consumer insights across teams.

One Kings Lane – Business & Operations Analyst, Product Team

New York, NY | 05/2019 – 04/2020

- Collaborated across Product, Engineering, and Design to shape the mobile app roadmap, launching features such as deep linking, FaceID login, and wish-list optimization that improved acquisition, engagement, and repeat usage.
- Led search and discovery analytics, supporting migration from Solr to a machine-learning–driven relevance engine; improved conversion rate and click-through rate by ~3% through query and ranking analysis.
- Applied topic modeling (LDA) to unstructured customer return comments to identify latent behavioral drivers of high-cost returns; findings informed product and vendor policy changes and were presented at the 2020 ISERC Conference.
- Built product and operational analytics to measure feature adoption, vendor performance, and fulfillment reliability; developed SQL-based vendor scorecards spanning sales, compliance, and logistics for 600+ vendors, identifying \$250K in preventable losses.
- Designed and implemented an automated returns tracking workflow (API-driven parcel & white-glove monitoring), reducing customer time-to-refund by 30% and improving post-purchase experience for high-value orders.

Education

- Binghamton University – SUNY (Watson School of Engineering) – M.S. Systems Science, 2020 | GPA: 4.0
- Vanderbilt University – B.S. Human & Organizational Development, 2018

Key Skills

- **Experimentation & Causal Inference:** A/B and multivariate testing; CUPED; incrementality & lift measurement; switchback designs; observational causal inference; survival analysis; funnel and cohort analysis; LTV, CAC, churn
- **Statistical Modeling & Machine Learning:** Regression; uplift modeling; clustering & segmentation; time-series forecasting; ensemble methods (gradient boosting, random forest)
- **Data Engineering & Analytics:** Python, SQL, PySpark; Databricks; GCP/BigQuery; Azure; large-scale metric pipelines; batch & near-real-time scoring; experimentation analysis at scale; cross-session/cross-device behavioral modeling
- **Product & Cross-Functional Leadership:** KPI design; hypothesis-driven analysis; roadmap influence; executive communication; partnership across Product, Engineering, and Finance; Platform measurement strategy
- **Applied NLP & GenAI:** LLM and RAG systems; embeddings; retrieval & summarization; structured evaluation and observability (Ragas, Arize); LangChain/LangGraph; OpenAI APIs

Leadership & Community

- **Senior Lead, P&G African Ancestry Leadership Network** | 2021–2026 – Partnered with executive leadership, including the Chief Communications Officer, to shape strategy, programming, and communications impacting early-career talent across the company.
- **Cross-Regional Data Science Community Lead (North America & Latin America)** – Co-led regional data science forums, partnering with senior leaders to set context, surface dissenting perspectives, and design programming for the annual global data science summit.
- **Mentor, Data Science & GenAI Capability Building** – Mentored analysts and data scientists across IT and Product teams, supporting adoption of experimentation, causal thinking, and applied GenAI practices.