ASTHA HARLALKA

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PROFESSIONAL SUMMARY

Driving marketing strategy through data-backed leadership. Marketing Data Analyst with 3+ years of experience shaping campaign, budget, and product decisions through high-impact analytics. Known for blending technical expertise (SQL, Python, GA4, A/B testing) with strong business acumen, stakeholder alignment, and executive-ready communication. Trusted partner to cross-functional teams, with a track record of influencing strategy and delivering measurable growth across channels.

CORE COMPETENCIES

Data Driven Marketing Strategy • Insight Storytelling & Executive Communication • Experimentation Design (A/B Testing & Multivariate Testing) • Marketing Mix Modeling (MMM) & Multi-Touch Attribution (MTA) • Churn Prediction, LTV Forecasting & CAC Optimization • NPS Analytics (rNPS, tNPS), Brand Lift, Incrementality Testing & Funnel Performance Analysis • Statistical Hypothesis Testing • Cross-Functional Collaboration & Stakeholder Alignment • Team Leadership & Enablement

WORK EXPERIENCE

DELOITTE CONSULTING US (Capstone - Carnegie Mellon University, Tepper School of Business)   *Pittsburgh, PA*

Generative-AI Marketing Analytics Consultant   *Jan '25 - April '25*

- **LLM Integration & AI Technology Creation:** Built an AI tool using Flask, LLMs, and Selenium to simulate 25+ customer personas and evaluate website content, UX and key marketing elements such as message clarity, CTA effectiveness, and brand perception, saving over 12,000 hours of manual review across 1,000+ websites.
- **UX Optimization & Business Impact:** Engineered automated testing and persona flows with Selenium, enabling a 25% increase in website usability scores and driving adoption of strategic recommendations by client teams.
- **Insight Validation:** Benchmarked persona feedback across multiple LLMs, applying a 70% agreeableness threshold to reduce hallucinations and ensure high-confidence insights for optimizing conversion funnels, UX, and content performance.

PUBLICIS GLOBAL DELIVERY (Subsidiary of Publicis Groupe)   *Mumbai, India*

Associate Manager, Marketing Analytics and Paid Media Optimization   *Jul '23 - Jan '24*

- **Revenue Growth:** Created A/B testing frameworks, attribution modeling strategies & analyzed data with SQL & Python, optimized ad delivery improving return on ad spend (ROAS) by ~30%, generating $7.2M in incremental revenue for clients.
- **Data Analytics and Ad Optimization:** Decreased trafficking errors using event tracking insights via Google Tag Manager (GTM) by 13% month-on-month, saving an estimated 40+ hours/month of manual rework, through deep analysis of delivery KPIs using SQL and Tableau.
- **Process Automation:** Proposed and delivered automation initiatives that cut manual workload by 25%, strategically positioning the team to scale services and manage $2M in added revenue from a key Media & Entertainment account.
- **Team Enablement & Onboarding Leadership:** Served as Training Lead for onboarding 9 new analysts across global offices; developed SOPs, led hands-on workshops, and resolved 100+ technical blockers, accelerating ramp-up time by 30% and ensuring SLA compliance across client accounts.

Ad Operations and Media Performance Analyst   *Feb '22 - Jun'23*

- **Process Improvement:** Led global ad operations process evaluation to identify pain points and drive compliance improvements across 15+ countries, enabling 3,500+ error-free campaign deliveries (an unprecedented milestone).
- **Performance Analysis:** Analyzed CM360 trafficking logs, DV360 performance metrics, QA failure rates, and time-to-live metrics to identify workflow inefficiencies, improving efficiency by 48% and reducing turnaround time by 42%.
- **Ad Fraud & Viewability Analysis:** Reduced invalid traffic exposure by ~35% using IAS (Integral Ad Science) insights, improving ad spend efficiency and media delivery quality across campaigns.
- **Data Governance:** Designed data pipelines with GDPR-compliant event tracking logic, reducing risk exposure and supporting SLA-compliant campaign launches.

Marketing Analyst   *Jun '21 - Jan '22*

- **Customer Acquisition and Media Optimization:** Designed and executed A/B tests to evaluate creative and media performance, increasing click-through rates (CTR) by 25% and reducing customer acquisition costs (CAC) by 18%.
- **Project Management:** Effectively managed coordination and optimized task assignment to maintain ~95% team utilization.
- **Ad Trafficking:** Streamlined ad trafficking processes, reducing errors for special request projects and saving ~120 hours/week.

Recognition: Two-time "Achiever" awardee, recognized by the CEO for outstanding performance.

EDUCATION

CARNEGIE MELLON UNIVERSITY – TEPPER SCHOOL OF BUSINESS   *Pittsburgh, PA*

Master of Science in Business Analytics – MSBA (Merit Scholarship Awardee)   **GPA: 4.00/4.00**   *May '25*

Leadership: Student Leadership Council – Operations Officer and GSA Representative

NARSEE MONJEE COLLEGE OF COMMERCE AND ECONOMICS   *Mumbai, India*

Bachelor of Commerce (Financial Accounting and Auditing)   **GPA: 3.82/4.00**   *May '21*

Leadership: Performing Arts Association –Marketing & Finance Head; Finance and Investment Cell – Elected Director

SKILLS

- **Programming and Analytics**:
  Python (Pandas, NumPy, Scikit-learn, XGBoost) • R

- **Databases and Data Handling:**
  SQL • NoSQL (MongoDB) • Data Cleaning & Manipulation • ETL/ELT • Data Storytelling

- **Visualization & BI**:
  Tableau • Power BI • Advanced Microsoft Excel (VBA, Power Query) • Looker (Google Data Studio)

- **Marketing & Web Analytics:**
  Google Analytics (GA4) • CM360 • DV360 • Integral Ad Science (IAS) • Mailchimp • Impact (Affiliate) • Google Tag Manager (GTM) • HubSpot CRM

- **Workflow and Automation:**
  Flask • Selenium • Git • Airtable • Jira • WordPress

- **Modeling and Methods:**
  A/B & Multivariate Testing • MMM • MTA • Churn Prediction • LTV Forecasting • Hypothesis Testing • Brand Lift • Incrementality Testing

DATA & MARKETING ANALYTICS PROJECTS

- **Predictive Modeling for Customer Acquisition:** Developed predictive logistic regression & decision tree models in R to optimize a bank's telemarketing campaign, improving customer targeting and achieving a 90% cost reduction and 2.5x increase in net profit.
- **Churn Prediction and Customer Retention:** Designed a churn prediction model in Python & implemented a proactive retention strategy using an Excel simulator to optimize offers for at-risk customers, improving LTV by $4.39M & achieving 757% ROI.
- **Competitive Analysis using Topic Models:** Utilized LDA and Euclidean distance in Python to cluster 1,100+ films by topic and identify optimal 2014 release date for the film, "*The Maze Runner*", reducing direct-release competition by 23%.
- **Ford Ka Market Segmentation:** Applied k-means clustering on demographic and psychographic data to segment small-car buyers and identify high-MQL clusters; boosted alignment with trend- and value-driven consumers, informing Ford's go-to-market strategy and campaign targeting.
- **Predictive Investment Strategy**: Engineered an end-to-end LendingClub pipeline with ML models for return and default prediction, including K-means risk clustering and an integer-optimized portfolio of 100 loans, yielding a 28% return at 8.4% risk and delivering over four times the ROI of baseline portfolios.
- **Ethical AI in Insurance:** Assessed fairness, privacy, and explainability in insurance claim prediction models using LIME, DiCE, and FairLearn; developed a governance framework to reduce disparate impact across intersectional groups and support responsible AI adoption.

COURSES AND CERTIFICATIONS

- Stanford Continuing Studies - Create Customers for Life: How to Understand, Measure and Drive Loyalty (Grade: A) (2024)
- The Wharton School (University of Pennsylvania) – Customer & People Analytic   (2024)
- Google Analytics Individual Qualification (GA4) – Google Skillshop   (2025)
- Digital Marketing Certification – HubSpot Academy   (2025)
- Inbound Marketing Certification – HubSpot Academy   (2025)
- GMP Campaign Manager 360 (CM360) & Display and Video 360 (DV360) – Google Skillshop   (2023)