ASTHA HARLALKA

+1 (412) 390 5590 | aharlalk@tepper.cmu.edu | www.linkedin.com/in/asthaharlalka **EDUCATION**

CARNEGIE MELLON UNIVERSITY – TEPPER SCHOOL OF BUSINESS GPA: 4.00/4.00

Master of Science in Business Analytics – MSBA (Merit Scholarship)

• Leadership: Student Leadership Council - Operations Officer and GSA Representative

NARSEE MONJEE COLLEGE OF COMMERCE AND ECONOMICS

Bachelor of Commerce (Financial Accounting and Auditing)

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

EXPERIENCE

GPA: 3.82/4.00

DELOITTE CONSULTING US (Capstone | Carnegie Mellon University, Tepper School of Business)

Simulated Consumer Testing with AI

- 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 (One of the world's largest communications and marketing services company) Mumbai, India Jul '23 - Jan '24

Associate Manager

- Revenue Growth: Created A/B testing frameworks, analyzed marketing data using SQL and Python, and optimized ad delivery improving return on ad spend (ROAS) by $\sim 30\%$, generating \$7.2M in incremental revenue for clients.
- Data Analytics and Ad Optimization: Decreased trafficking errors 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.

Ad Operations Analyst

- 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, OA 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.

Analyst

- 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.

SKILLS

- Programming and ML frameworks: Python, R, Scikit-learn, PyTorch, TensorFlow, XGBoost, LLMs, Prompt Engineering
- Databases and Data Handling: SOL, NoSOL (MongoDB), Pandas, NumPy, Data Cleaning, ETL/ELT, Data Storytelling
- Tools and Automation: Tableau, Power BI, Advanced Microsoft Excel, Flask, Selenium, VBA, Git, Airtable, Jira, Wordpress, Adobe Analytics, Google Analytics, CM360, Integral Ad Science (IAS)
- Marketing Analytics and Business Strategy: A/B Testing, Marketing Mix Modeling (MMM), Multi-Touch Attribution (MTA), Campaign Performance Analysis, Growth Marketing, Churn Prediction, Forecasting, Customer Journey Mapping, Optimization
- Courses: Stanford Continuing Studies Create Customers for Life: How to Understand, Measure and Drive Loyalty (Grade: A); The Wharton School (University of Pennsylvania) - Customer & People Analytics

MARKETING ANALYTICS PROJECTS

- Predictive Modeling for Customer Acquisition: Developed predictive logistic regression and 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.
- Cell2Cell Proactive Retention Campaign: Designed a churn prediction model in Python and implemented a proactive retention strategy using an Excel simulator to optimize offers for at-risk mobile customers, improving LTV by \$4.39M and 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 Maze Runner, reducing direct-release competition by 23%.
- Ford Ka Market Segmentation: Applied k-means clustering in R on demographic and psychographic data to segment small-car buyers ٠ and identify high-MQL (Marketing Qualified Lead) clusters for Ford Ka, boosting alignment with trend- and value-driven consumers.

Mumbai, India Mav '21

Pittsburgh, PA

May '25

Pittsburgh, PA

Jan '25 - April '25

Jun '21 - Jan '22

Feb '22 – Jun'23