Syed Misbah

mailsyedmisbah@gmail.com   +91-9066665419   linkedin/syedmisbah   syedmisbah.github.io   medium/data-decoded

Experience | 4 Years | CPG, Retail, Manufacturing, Energy, Supply Chain, Airlines

Lead Data Scientist – Evalueserve
Mar '21 – Present

- **Leading** a team of **22 data scientists** for multiple engagements across retail, food and beverage and energy sectors
- Manage **multiple concurrent initiatives** and projects of varying sizes/complexities and external vendor relationships, developing, coordinating and maintaining program and project milestones
- Improve pre-existing **models and algorithms** that affect the bottom line of the organization
- Designing & developing the data infrastructure for entire DIPP lifecycle for a **$10bn** organization – which included data harmonization, descriptive analytics and predictive modeling POC and production stack
- Overhauled the **MLOps** pipelines for three clients – migrated from archaic legacy deployments to microservices based loosely coupled data infrastructure.

Senior Data Scientist – Mu Sigma Inc.
Aug '19 – Sep '20

SALES FORCE PLANNING & OPTIMIZATION | RUSSIAN PETCARE MANUFACTURER

- **Leading a team of 6 analysts in a $1.3MM** engagement to build a sales force planning and optimization tool to maximize sales uplift or ROI and reduce expenditure
- **Clustered** outlets, measured impact of visits using a **regression** model and designed a **Mixed Integer programming** (MIP) based optimizer to generate visit plans
- Developed a planning & reporting tool using **PowerApps** to design plans and report results
- Impact of ~3% incremental **sales uplift**(+**$6.2MM)** and sales force expenditure **reduced by 24%($0.5MM)** – and savings of **960 hours/quarter effort**

STRATEGIC REVENUE MANAGEMENT | US CPG GIANT

- Created **a sales driver model** for attribution of sales volume to key imperatives for around ~5,000 products with **MAPE <20%** using ElasticNet regression
- Developed a **Trade Promotion Optimization (TPO)** framework which enabled the Account teams to design optimized promo plans leveraging **Seasonality, Promotional Pricing, Promotional Execution, Product Distribution, Co-promotion and Cannibalization with inter and intra competitors** for a win-win scenario with Retailers - leading to reduction of ~2100 hrs. of manual effort/quarter
- Developed a tool in **PowerApps** atop the sales driver engine, to scale insights generated and unlock potential across all products and retailers in the US - **unlocking potential value of ~$7MM/year**
- The tool is powered by a **linear optimizer** on the sales driver model & builds a **52-week calendar** detailing optimal price points, ideal promotion weeks, and optimal execution distribution points

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Data Scientist - Mu Sigma Inc.
Aug '17 – July '19

COMPETITOR CLASH FORECASTING | US CPG GIANT

- Developed a Competitor Clash Forecasting framework to help **account managers design promotions** in accordance with forecasted competitor prices
- The framework uses **Holt Winter** models to forecast the prices of competitor products and uses these prices to predict manufacturer and category sales through a **regression-based sales attribution** model
- Built a dashboard in **PowerBI** for account managers to negotiate with category buyers to take data driven decisions to maximize sales considering ROI & retailer margin
- **30% reduction** in negotiation time and sales uplift of **2%($3.6MM)** across four retailers in six months

VIDEO OCCASION DETECTION & CLASSIFICATION | US CONSUMER DATA PROVIDER

- Implemented **CNN based YOLO object detection algorithm** for a video occasion detection tool – to detect the class and number of objects present in a scene – **mAP 51.5%**
- Built a **XGBoost** model to **classify a scene into consumption, transaction or celebration** based on the class and number of objects detected by YOLO – **Accuracy 87% / AUC 0.82**

SKILLS

Code	Tools & Viz
Python	Jupyter
PySpark	Azure & DevOps
R	PowerBI
SQL	Neo4j
OR-Tools	Powerapps

Analytics and Math

- **Statistics** - Hypothesis testing & experiment design
- Exploratory Data Analysis
- **Regression** (Linear and non-linear tree based)
- **Classification** (Logistic, Decision Trees, Ensemble – random forest/ XGBoost)
- **Time Series Forecasting**
- **Convolution Neural Networks**

Business

- Problem Solving
- Story Boarding
- Agile Management
- Stakeholder Management

ORG INITIATIVES

Mentorship

- Project mentor - 12 junior analysts
- Python tutor - 20-member team

Trainer

- Trainer for internal teams on modeling and CPG Industry – trained 130 new inductees

HONORS

Awards

- 2 SPOT awards for technical capability, leadership and accountability
- Academic Excellence Award - 2017

Certification: Decision Sciences - Certified by Mu Sigma for problem solving and analytical skills

EDUCATION

Bachelor of Engineering
Instrumentation Technology
Visvesvaraya Technological University
BIT, Bangalore | 2017
First Class with Distinction

Secondary Education – CISCE
XII - 85% | X : 88%