Syed Misbah

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Data Science Manager – Media & Digital Marketing, CPG, Retail, Manufacturing

DATA SCIENCE MANAGER – DISH NETWORK
Nov '21 – Present

- **One of two** AI/ML leaders at **DISH India**, led **two high impact** & **three medium** impact initiatives
- Total impact of **$7.5M+** in top line revenue and savings, and **saved 780 hrs. / qtr.** in effort
- **Identified & converted** high ROI opportunities, to **boost leadership's confidence** in ML solutions
- **Built a talent pool of 15+** people that helped us in taking on bigger and high impact problems
- Primary role was to **architect and develop data science solutions** –
  - At intersection of Data science, MLOps and Software Engineering
- Secondary role was to **develop and drive a data driven culture** at DISH at a cross functional level

Dynamic Creative Optimization (DCO)

- **Architected** the DCO solution for Sling (OTT Platform) and Dish – showing ad creative to users based on 1st party DSP data and 3rd party Nielsen data – decisioning in real time (~200 ms response time)
- **Extracted elements from creatives using CNNs**, trained regression models to **identify best performing element for each user pattern**, and then used this mapping to **create an ad using JS/HTML in real time**
- **~29% CTR uplift**, 16.7% subscription uplift, and savings of **290 hrs./qtr. effort**

Recommendation Engine 2.0

- **Building a hybrid recommendation engine** to recommend the right movies and shows to viewers both in tiles and in search for 1M users
- Architected a **high-throughput low-latency data pipeline** which handled all this data at scale
- Currently rebuilding search recommendations from ground up by using retrieval and ranking algorithms

AI Smart Bidding Platform

- Led **MTA (Multi Touch Attribution)** initiative for 11 channels - to enable holistic view of channel ROAS
- Developed the **Smart Bidding algorithm** which optimizes for spend on high ROAS patterns (**-47% SAC**)
- Built **subscription & viewership forecasting** model **(<10% MAPE),** which led to +0.12 AUC in churn

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LEAD, DATA SCIENCE – EVALUESERVE
Mar '21 – Oct' 21

- **Led** a team of **seven data scientists** for engagements across manufacturing and energy domain
- Building a deep learning **CNN based object detection model** which identifies defects in galvanized plates for a steel manufacturing client – **improving defect detection by 54%**
- Overhauled **MLOps** pipelines – migrated from legacy deployments to microservices architecture

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DECISION SCIENTIST – MU SIGMA INC.
Aug '17 – Sep '20

Sales Force Planning & Optimization | Russian Petcare Manufacturer

- **Led** a team of **six data scientist** to build a sales force optimization tool to **maximize sales uplift & ROI**
- **Clustered** outlets, measured **impact of visits** using regression & generated **optimized visit plans**
- ~3% **sales uplift**(+**$6.2MM)** and expenditure **reduced by 24%($0.5MM)** –savings of **960 hrs./qtr. effort**

Strategic Revenue Management | US CPG Giant

- Created **a sales driver model** for attribution of sales to key drivers with **MAPE <20%** using ElasticNet
- Developed a **Trade Promotion Optimization (TPO)** framework which enabled client to design optimized promo plans leveraging **Seasonality, Pricing, Execution, Distribution, Co-promotion & Cannibalization**
- Powered by a **linear optimizer** atop the sales driver model - **unlocked potential value of ~$7MM/year**

Competitor Clash Forecasting | US CPG Giant

- Developed a Competitor Clash Forecasting framework to help **account managers time promotions**
- The framework uses a combination of **time series forecasting** & **attribution** models
- **30% reduction** in negotiation time and sales uplift of **2%($3.6MM)** across four retailers in six months

SKILLS

Code	Tools & Viz
Python	ETL Tools
PySpark	AWS & Azure
R	Lambda
SQL	Neo4j
OR-Tools	SageMaker

Analytics and Math

- **Statistics** - Hypothesis testing, EDA & experiment design
- **Regression** (Linear / tree based)
- **Classification** (Logistic, Decision Trees, Ensemble – random forest/ XGBoost)
- **Time Series Forecasting**
- **Deep Learning -** Convolution Neural Networks
- **Recommendation Engines**
- **Data Pipeline** Architectures

LEADERSHIP

Mentorship and Support
- Career mentor - 23 senior DS
- Cross functional ML solution engineer for SWE team

Trainer
- Trainer for internal teams on modeling and software analytics - trained 12 leadership members in data & AI / ML

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

HONORS

Awards
- 3 awards for technical capability, impact award for leadership & accountability

- Academic Excellence Award - 2017

EDUCATION

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

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