# **Syed Misbah**

⊠ mailsyedmisbah@gmail.com

+91-9066665419

linkedin/syedmisbah

syedmisbah.github.io

Satellite TV & OTT Broadcasting, Marketing, CPG, Retail, Telecom

#### **DISH NETWORK - DATA SCIENCE MANAGER**

Nov '21 - Present

- AI/ML leader at DISH India, led two high impact & three medium impact initiatives
- Total impact of \$3.5M+ in top line revenue and savings, saved 380 hrs. / qtr. in effort
- Identified & converted high ROI opportunities, to boost leadership's confidence in AI/ML solutions
- Built a talent pool of 10+ people that helped us in taking on bigger and high impact problems

#### Market Mix Modeling (MMX)

- Successfully developed & deployed a MMX solution which manages \$4MM/mo across 7 channels
- Uses a combination of ridge regression-based attribution model and non-linear optimization
- Potential improvement of 7.5% in top-line revenue while reducing marketing spend by 1.8%

#### **Dynamic Creative Optimization (DCO)**

- Architected the DCO solution for Sling showing creative to prospects based on real-time data
- Extracted elements from creatives using CNNs, trained regression models to identify best performing
  element for each prospect pattern, and then used this mapping to stitch dynamic creative in real time
- ~29% CTR uplift, 6.7% subscription uplift, and savings of 290 hrs./qtr. Effort

#### **AI Smart Bidding Platform**

- Developed the Smart Bidding Algorithm which optimizes for spend on high ROAS patterns (-17% SAC)
- Led MTA (Multi Touch Attribution) initiative for 7 channels to enable holistic view of channel ROAS
- Built subscription & viewership forecasting model > led to +0.12 AUC for downstream churn models

#### **Predictive Reach Booster**

- Developing a predictive solution aimed to increase the reach of brands which advertise on Dish
- The core idea is to predict the viewership for each network and household in a given timeframe
- This enables brands to know the direct & potential viewership before they launch a campaign
- Brands can then target those specific potential households which they cannot reach directly using target files in set top boxes – unlocking potential additional revenue of ~\$15M/year

## **EVALUESERVE** - LEAD, DATA SCIENCE

Mar '21 - Oct' 21

## **Steel Plates Defect Detection | US Steel Manufacturer**

- Led a team of three data scientists for engagements across manufacturing and energy domain
- Built a CNN based object detection model which detects defects in galvanized plates (0.54 mAP)

#### **MU SIGMA INC. - DECISION SCIENTIST**

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

**Tech Stack** 

Python AWS (DE, DS)
PySpark Azure
R Dataiku
SQL / No SQL Neo4j Graph
OR-Tools Tableau / Power BI

## **Data Science / Machine Learning**

- **Statistics** Hypothesis testing, EDA & experiment design
- Regression (Linear / Tree based)
- Classification (Logistic, Decision Trees, Ensemble – random forest/ XGBoost)
- Time Series Forecasting
- Deep Learning CNNs
- End-to-end data pipeline

#### **LEADERSHIP**

## **AI/ML Center of Excellence**

- Establishing AI/ML COE which will serve as the central team for enabling driving data culture at DISH India
- Training executive leadership team on evangelizing data & AI / ML

## **Mentorship and Support**

- Mentor for 2 senior and 1 Junior DS
- Cross functional ML solution engineer for hardware engg. and ad-tech team

## **HONORS & AWARDS**

 3 spot awards for technical capability & 2 impact awards for leadership & accountability

## **EDUCATION**

Bachelor of Engineering, IT

Bangalore Institute of Technology VTU | 2013 - 2017 First Class with Distinction

## Secondary Education

Carmel Junior College, CISCE

**Academic Excellence Award** 

2012 – XII : 85% 2010 – X : 88%