

Sonal Singh

sonalsingh.contact@gmail.com

+91-9176166372

[linkedin/sonal2606](https://www.linkedin.com/in/sonal2606)

[sonalsingh96.github.io](https://github.com/sonalsingh96)

medium.com/transformatlytics

Experience | ~1.5 Years | Fintech, Financial Services, CPG, Retail

Data Analyst – NIUM

Nov '20 – Present

Leading data sciences for corporate business unit - institutionalizing predictive and prescriptive analytics.

- Designed and developed a **business datamart** – harmonizing **third party API gateway, Google Analytics, Clevertap and internal data**.
- Built **MLOps** pipelines to ingest **unstructured MongoDB** data into **structured business warehouse**
- Delivered insights around **behavioral analytics** of users (e.g. conversion funnel, drop off behavior) - which helped strategize and benchmark **user-centric UI/UX changes**
- Built a **XGBoost classification** model to **predict if a user is going to transact** or not – promotions were given to users who had a high probability of transacting – reducing promo expenditure by **12%**
- Conducted **workshops** with **product teams** to evaluate and overhaul the **success metrics**

Trainee Decision Scientist – Mu Sigma Inc.

Nov '19 – Nov '20

Implement predictive models for solving business problems - generate insights and present to client teams

SALES FORCE PLANNING & OPTIMIZATION | RUSSIAN PETCARE MANUFACTURER

- Built a **sales force planning and optimization tool** to maximize sales uplift/ROI and reduce expenditure.
- Clustered** outlets, measured impact of visits using a **regression** model
- Designed a **Mixed Integer programming (MIP)** based **optimizer** to generate visit plans
- Developed a planning & reporting tool using **PowerBI and 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**

MARKETING MIX MODEL & PRIORITIZATION ENGINE | ENERGY BAR MANUFACTURER

- Created a **sales driver model** for attribution of sales uplift to different marketing levers like **price promotions, advertisements, in-store sampling, features and displays** using **ElasticNet regression**
- Designed a **marketing mix optimizer** to create the **best marketing plan** which takes the investment associated with each promotion channel and provides recommended investment to maximize ROI
- Built a **prioritization engine** which recommends the stores and regions sales reps need to focus on for maximum uplifts - **reducing \$390k in in-store sampling** investments and increasing sales uplift by 7%

Trainee - Mu Sigma Inc.

July '19 – Oct '19

Trained in Mu Sigma University – learning end to end components of DIPP framework and implement stretch projects

COMMERCIAL MARIO REPORTING | RUSSIAN CPG MANUFACTURER

- Built and automated the creation of business data mart based on **SAP Atlas** for **all plants across Russia**
- Implemented a **data quality management layer** to the **harmonized data** source to improve the quality and scope of data driven decisions; which was leveraged to **refresh 20+ dashboards**
- Designed and developed interactive **PowerBI Dashboards** to track performance of **supplier contracts**

Publications

Optimizing Stock market prediction using LSTM networks

This [paper](#) proposes using a LSTM and auto-encoder based deep learning model to predict stock market price.

Social media data analysis twitter sentimental analysis

This [paper](#) talks about sentiment analysis of tweets on the Barcelona terror attacks.

Feature selection effects on classification algorithms

This [paper](#) compares the effect of feature selection on various classification algorithms.

SKILLS

Code

R
SQL
Python
PySpark
MongoDB
Google Analytics

Tools & Viz

Jupyter
Azure & DevOps
PowerBI
OR-Tools
Clevertap

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)
- LSTMs**

Business

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

ORG INITIATIVES

Trainer

- Trainer for internal teams on modeling in CPG Industry

HONORS

Awards

- SPOT award for technical capability, leadership and accountability

Certification

Google Analytics
DataCamp – R, Python

Internship and Training:

Web Development – Internship
Android Programming
Ethical Hacking

EDUCATION

Bachelor of Engineering

Computer Science
Veltech Technical University
2015 - 2019
GPA – 9.26/10.00

Secondary Education – CMS, Lucknow

CISCE - XII - 92% | X : 86%