

MOTILAL MEHER

Analyst, Deloitte India

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EDUCATION

M.Tech in Industrial and Management Engineering (CGPA 8.67, Rank 4/25)

IIT Kanpur (2018-20)

- **Mr. & Mrs. S.N. Mittal Gold Medal** for **best all round performance** in academics and extra-curricular, IIT Kanpur.
- **Student senate Y18** (2019-20) Vision: Better incorporation of the voice of the PG student in the Gymkhana.
- **Awarded A*** in Probability and Statistics (IME 602) for outstanding performance.

B.Tech in Mechanical Engineering (CGPA 8.45, Rank 2/80)

PMEC, Berhampur (2013-17)

- Awarded by Head of Department for **best all rounding performance**.
- Secured **99.01** percentile in GATE-2018(Mechanical) among 200000 students.

Class XII (CHSE, Odisha): 82.5% | Class X (BSE, Odisha): 87.16%

WORK EXPERINECE

Commodity Price Forecasting, Strategy - Analytics & Cognitive Consulting at Deloitte India | Python, GCP, Apache Beam

- Built an **Intelligent Buying Platform** in partnership with **google cloud**, to forecast commodity price and give **real-time insights** for informed decision making, to improve efficiency, accuracy and optimize value.
- Designed a **reusable template** to plug the data for, post commodity selection and **identify relevant price impacting factors**.
- Automated in built **feature creation engine**, built a **ML/AI engine** to select the best fit model and generate forecasts and designed Google data studio screens for visualize the key insights.
- Designed an **ETL batch pipeline** for data ingestion by leveraging **Google Dataflow** using **Apache beam** module.
- Used **ARIMAX** and **Random forest** model for monthly, **LSTM** for Daily and **Bayesian methods** for weekly forecast and used **out of time validation techniques** for model selection based on **RMSE score**.

MTN Customer Churn Prediction(Ongoing), Strategy - Analytics & Cognitive Consulting at Deloitte India | Python, GCP, K3s, Kubeflow

- Develop a **predictive model** to identify prepaid subscribers at risk of becoming inactive and to create a hybrid (On premise and GCP) **MLOps** solution using **Kubeflow pipeline**.
- Build an end to end MLOps solution (**CI/CD/CT**) on dummy telecom data using **Kubeflow pipeline** and **Google AI platform** for model **training and deployment**, **Scoring** and **model retraining** if **data drift** is detected.
- In demo used ratio feature building, VIF, IV methods for feature selection, **logistic regression**, **Random forest** and **Xgboost** for model building and reported key **classification metrices**, **lift and gain chart** and **variable importance score**.

INTERNSHIP

Business Analyst, Mphasis Next-lab (2019)

Process Flow analyser (Convert Image of Processmap to industry standard XML code using Image processing techniques) | Python

- Identify the Cross-functionalities (Leverage **morphological operations** with the creation of **custom kernels**).
- Localize and classify the symbols (Leverage **contour properties** and **contour Hierarchy**).
- Localize the **arrows**, **identify the extreme end** and classify them (Leverage contour properties), **identify sequences of symbols** (**adjacency matrix** to represent directed sequence among Nodes).
- Visualization of directed graph from adjacency matrix using **NetworkX** python package.
- Create and parse an BPMN 2.0 XML documents using **xml.etree.cElementTree** python packages.

M. Tech THESIS

Aspect Based Helpfulness Prediction of Amazon Product Review Data | Python, Java, Text Mining

- Extract **transferable and product-independent high-level aspects** from the reviews using **product category information** and a special type of **generative topic model** called **Twitter-LDA**.
- Build a **two-layer architecture Support vector regression** model for aspect based helpfulness by leveraging **textual features** from reviews (**Structural, Empath based, General Inquirer and Aspect based**).
- Compare it with based models by **spearman's correlation coefficients** metrics.

OTHER PROJECTS

Stochastics calculus (Martingale process & its applications) | Python

- Applying **martingale stopping and convergence theorems** to study **Constrained random walk** (gambler's ruin problem), an **Urn process**, **ABRACADABRA Problem** and simulate the results.

Scribble sketch (Ongoing hobby project) | Python

- A machine that can create **scribble drawing** (but not only) created by series of algorithms written in Python.

TECHNICAL SKILLS

- Statistical modelling, Machine Learning(predictive), MLOps, Image processing, Data engineering (ETL design).
- Programming language: Python, R, SQL, Apache Beam, Java
- Tools/Framework: GCP (AI Platform, Kubeflow pipeline, Dataflow, Bigquery, Cloud build, Cloud function), TensorFlow, Keras, CI/CD, Docker, Containerization, Git

EXTRACURRICULAR ACHIEVEMENTS

- Finished First in High jump at school level (2004, 05, 06, 07) and in zonal level (05, 06, 07), JOSH-19(intra IITK).
- IITK Hall8 Cricket: Enthusia 2k18 winner, Josh 2018 runner up and Josh 2019 winner.
- Completed Pin Parvati trek (Altitude 17,500 Ft), Sandakphu trek (Altitude 12,000 Ft).