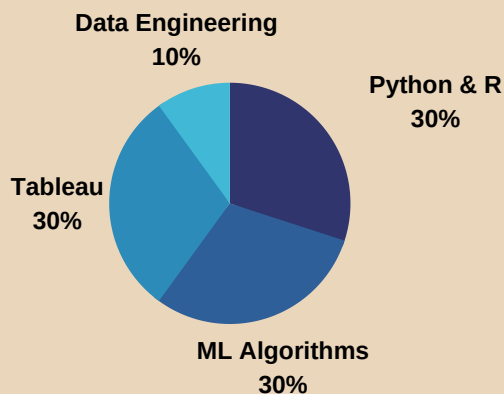# MAINAK RAY
## MACHINE-LEARNING / DATA VISUALIZATION

Andul Choudhuri Para ,Howrah-711302 West Bengal ,India
+91 8420803481
mainakr748@gmail.com

## Professional Summary:

- I have three years of working experience as a business data analyst.
- I have worked with various types of projects using Regression, classification-based prediction models, MPL, LSTM
- Comfortable with various supervised and unsupervised ML algorithms such as linear models, decision tree-based models Xgboost, AdaBoost, etc,
- Comfortable with R and Python programming languages.
- Comfortable with various deep learning frameworks (Keras, TensorFlow).
- Comfortable with BI software such as Tablue / Power Bi.
- Comfortable with SQL(PySQL) and NO-SQL (PYMONGO) databases.
- Comfortable with Project management software (P6 EPPM, MSP).
- Working knowledge of NLP and RPA.

## Areas of Expertise



Data Engineering 10%
Python & R 30%
Tableau 30%
ML Algorithms 30%

## Certification

- "Introducing Robotic Process Automation (RPA)" (Automation Anywhere ).
- Artificial Intelligence Foundations: Neural Networks (NASBA).
- Building Deep Learning Applications with Keras 2.0(LinkedIn).
- Business Analytics (LinkedIn).erc

## Business /Domain Knowledge

- Construction and Infrastructure Development.
- HR Procurement.
- Project Planning and Control
- Market Mix Modeling

## Professional History

**Buzzworks Business Services Pvt. Ltd (June 2021 - present).**
**Associate Consultant-ERM 1 ( Enterprise Risk Management: Operations )**
**Client: Capgemini.IN | June 2021 - present**

**Data Analysis and Business insights :**
- Preparing Dashboards using Tableau public and Excel.
- Data Analysis using Excel (ex: exponential smoothing, VLookup, V-Look up, H-Look up, Sumif, Pivot, etc.)
- Preparing DECK and **SWOT Analysis, Change management.**

**Vendor Communication & Grievance Readdress:**
- ·Respond to the queries related to mandates.
- ·Address the issues with the ability to communicate complex ideas.
- ·Have a more proactive approach and ensure that the challenges are dealt with in the timelines within the periphery of the Company's norms.

**Achievements :**
- Prepared POC for "Asset Management and Control" to minimize the financial risk.
- Prepared end-t0-end business flowchart of "Contract Extension system "to ease AUTOMATION as well as hassle-free procedure.

**Infinity PMC Solutions Pvt Ltd**
**Professional Service Consultant**
**Client: Rolls-Royce.Com | JAN 2021-Jun 2021 (Under Contract)**

**Data Analysis and Business insights :**
- Preparing project management and control Dashboards in Excel.
- Data analysis useing MSP ,Primavera P6 and Excel.
- Preparing Project schedule and risk modeling using PERT -CPM method.
- Preparing go-ahead plan implementing best practices to ensure the integrity of data and quality of output after the study of several reports, and drawings Contracts.

**Achievements :**
- Prepared POC for "Vendor Performance Scoring System" to complete the project within budget and schedule.
- Prepared EOT to work out a win-win strategy for Extension of time without penalty ..

**NerdyTurtlez.com**
**Subject-matter expert (Machine Learn and AI)**
**Client: start ups | Jul 2020 - Oct 2020**

**Data Analysis and Business insights :**
- Preparing project management and control Dashboards in Excel.
- Preparing B-PLAN for start-ups.
- writing technical blogs on machine learning and data science.
- Preparing University projects using WEKA, R, IBM SPSS, Python.

**Achievements :**
- **Publish Python packages on PYPY.**
  - **binary-decision-parameter (https://pypi.org/project/bianary-decision-parameter/).**
    - The main focus of the project is to find out the best parameters of the decision tree to achieve the desired results for example recall, accuracy,f_score, and so on.

  - **TSmodel 0.2 (https://pypi.org/project/TSmodel/)**
    - The main focus of the project is to find out the best parameters of ARIMA based on the initial guess.

**S. K Samanta & Co. (P) Ltd.(April2019-Jun 2020).**
**Gannon Dunkerley & Co., LTD. (Nov 2017 -JAN 2019).**
**Graduate Engineering Trainee**

**Data Analysis and Business insights :**
- implementation of best practices to ensure the integrity of data and quality of output after the study of several reports, and drawings Contracts.
- Data analysis useing MSP ,Primavera P6 and Excel.
- Assist in the calculation of Budget Preparation as well as material Estimation.
- ·Ensure that the vendor payment is released on time as per the agreement clause.

**Reports :**
- Ensure that the reports are submitted on time as when required by the Client and management.
- ·Maintain monthly and yearly progress reports and No Show reports.
- ·Maintain vendor performance report.
- ·Ensure that the vendor payment is released on time as per the agreement clause.

**Currently pursuing IBM Machine Learning Professional Certificate**

- Supervised Machine Learning: Classification.
- Exploratory Data Analysis for Machine Learning.
- Supervised Machine Learning: Regression.
- Unsupervised Machine Learning: Clustering.
- Time series analysis and survival analysis.
- Artificial neural network and Reinforcement learning (ongoing)

**Bachelor of Technology (Maulana Abul Kalam Azad University of Technology); 2017.**

Graduated with B.Tech in Civil Engineering with a special interest in Earthquake engineering, operation research, and FEA.

## PROJECTS  https://github.com/mainak-cmd

**Factors Market Mix Modeling on Amazon Inventory Data. (https://github.com/mainak-cmd/MMM/tree/main)**
- NLP Techniques are used to calculate the popularity factor as a numerical factor (0-1scale).
- Using this factor and price we can determine how much promotion a product needs.

**Capgemini-Tech-challenge-2021**
- The main focus of the project is to prepare a recommendations system for cloth and electronic goods.
- Recommendations system :
  - Collaborative system
- Algorithm use:
  - NearestNeighbors(algorithm='brute', metric='cosine')

**House Prices - Advanced Regression Techniques (ML PROJECT)**
- Feature selection using lasso, prediction using random forest with hyperparameter tuning.
- kaggle rank 5682
- RMSE score 0.25592

**Factors Influencing strength of concrete -machine learning approach(ML PROJECT).**
- For these projects, eight factors are considered Cement, Blast Furnace Slag, Fly Ash, Water, Superplasticizer, Coarse Aggregate, Fine Aggregate, and Age.
- Algorithm use:
  - Feature selection: LassoCV
  - Model creation: Polynomial regression
- RMSE OF TRAIN SET 0.003621894295925656.
- RMSE OF TEST SET 0.004775801136676444

**Simple material estimator for residential buildings**
- Preparing an Object-oriented program in python to estimate building materials and labor resources for simple residential buildings.