NAMAN AGRAWAL

DATA ANALYST | MACHINE LEARNING ENTHUSIAST | MLOPS PRACTITIONER

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TECHNICAL SKILLS

Languages : Python, R, MySQL, PostgreSQL

Tools : Power BI, Excel, Streamlit, Docker, GitHub Actions, AWS (S3, EC2, ECR), MongoDB, Kubernetes

ML/AI/DL : Linear Regression, Logistic Regression, Random Forest, XGBoost, SVM, ANN, CNN, RNN, LSTM, Transformers

Libraries : Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, TensorFlow, Keras, PySpark, SciPy, Spacy, nltk

Concepts : MLOps, Model Deployment, CI/CD, Data Ingestion, Data Validation, Feature Engineering, NLP, Hypothesis Testing

NLP : Tokenization, Stemming, Lemmatization & Stop words, TF-IDF, Word Embedding, Sentiment Analysis

Productive : Linux, Windows, Excel, PowerPoint, markdown

WORK EXPERIENCE (Total: 5+ years)

Samatrix Consulting Pvt. Ltd. (Gurugram): Data Analyst & Team Lead

Sep 2022 - Present

- Leading a 6-member team delivering data science tools and training to 800+ students, achieving 4.8/5 satisfaction scores.
- Deploy automated ML pipelines for detecting real-time fraudulent transactions, improving accuracy by 15%.
- Developed Recommender system that analyze student feedback comments and filled forms, reducing attrition rates by 20%.
- Hands-on Experience in data analysis, Statistical Modeling, and Predictive Modeling using Python (Numpy, Pandas), SQL, and Excel.

MAT Holdings Inc. (Sonipat): Mechanical Engineer

Feb 2021 - Sep 2022

- Automated data workflows by developing VBA scripts to transfer and categorize production data across Excel sheets, reducing 70% manual efforts and saving 10+ hours/day.
- Developing Pad Assembly and part drawings, Printing drawings on CAD as per customer data for PPAP approval as well as Production.
- Managing complaints and issues from the production line

DB Engineering Pvt. Ltd. (Noida): Mechanical Design Engineer

Aug 2020 - Jan 2021

- Develop the Turning CAD Drawing of parts e.g., Knives, Holders, Cutters, Blades etc.
- Make packaging part drawings from OEM for Pad e.g., Shim drawings, Wire Indicators, etc.
- Creating and managing Job Cards according to Production Unit and maintain up-to-date documentation of process.

Preet Machines Ltd. (Ghaziabad): Asst. Design Engineer

Jul 2019 - Aug 2020

- Develop the detail drawings of Rolling Mill equipments e.g., Roller Table, Pinch Roll, Chain Transfer etc. using AutoCAD.
- Create Erection drawings of General Arrangement as per Layout and Bill of Materials(BOM) for purchase.
- Collect and analyze the Layout and carry out calculations for the preparation of Drawings.

PROJECTS

YouTube Comment Sentiment Analysis (Link)

(python, transformers, streamlit)

- 89% accuracy achieved by Boosting pre-trained model through custom preprocessing Hinglish text.
- Designed text preprocessing pipeline that handle null values, emojis, URLs, code-mixing, and Indian English dialects.
- **(0.91 F1-score)** Validated on 500 manually labeled comments.
- Interactive dashboard deployed for processing 700+ comments/min, showcasing analysis and analytics using graph.

Vehicle Insurance Claim Prediction – MLOps Project

(python, mlflow, fastapi)

- Developed end-to-end ML pipeline for predicting insurance claims. (Recall: 1.0, F1 Score: 0.93, and Accuracy: 0.88)
- Model deployed using **FastAPI on aws EC2 via Docker** with CI/CD using GitHub Actions and ECR.
- Implemented data ingestion, validation, transformation, training, and model registry on AWS S3.
- Enabled real-time predictions with a Fast API and used MongoDB Atlas for data storage.

Credit Default Risk Analysis (Link)

(python, catboost, streamlit)

- 0.88 F1-score achieved by developing ML model (CatBoost) on imbalanced dataset. (40k+ rows, 60+ features)
- Feature Engineering by filling nan values, VIF (>6), chi-square test, ANOVA and t-tests improving precision by 15% versus baseline.
- SMOTE Implementation for class balancing and hyperparameter tuning.
- Interactive front-end deployed for prediction for analyzing and categorizing risk into 4 buckets (1 to 4).

Real-Time Payment Fraud Detection System (Link)

(python, xgboost)

- 0.92 F1-score achieved using XGBoost on 6 million row dataset.)
- Solved severe class imabalance by using SMOTETomek and random undersampling hybrid techniques.
- Feature Engineering and created new features that improved precision by 18%.
- Automated Preprocessing and training Pipeline with (OneHotEncoder, StandardScaler etc.) via scikit-learn Pipeline.

EDUCATION

Chandigarh University; Master of Science (MS) - Data Science

(Aug/2024 - Jul/2026)

Kanpur Institute of Technology, Kanpur; Bachelors of Technology (B.Tech)

(Aug/2015 - Jul/2019)

ACHIEVEMENTS

- Secured Process Automation | Developed VBA scripts to automate cross-Excel data transfer and categorization, reducing manual errors by 70% and saving 10+ hours/day
- Kaggle Competitions Contributor | Participated in kaggle competition with code, dataset, and discussion contributions.
- **Published educational blogs and Jupyter notebooks** on machine learning and deep learning topics (e.g., RNNs, Gradient Descent, Backpropagation), combining mathematical intuition and analogies. e.g., RNN, Optimizers, BackPropagation, Logistic Regression