PAYAL JAIN

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PROFESSIONAL SUMMARY

I bring **2+ years of Data science** and **Analytics expertise**, applying **AI concepts** to solve intricate business challenges. Proficient in **SQL, Python, Machine Learning**, I excel at **data manipulation**, effectively communicating insights to diverse **stakeholders** and deliver measurable results.

WORK EXPERIENCE

Birlasoft | Data *Analyst* *July 2022 – Present*

- Ingested data from diverse sources, including user inputs, order records, and EDI history, handling up to **50,000 records monthly** to identify key trends and patterns through comprehensive **exploratory data analysis (EDA).**
- **Developed SQL queries** to extract, transform, and load (**ETL**) data to get insights for the clients
  Created interactive **dashboards and visualizations using Tableau** and **Matplotlib**, leading to a **40% increase** in client engagement and improved reporting accuracy. Applied **data-preprocessing** techniques throughout the process.
- Collaborated with team to build a **Machine Learning model using Regression algorithm** to forecast demands and automate processes, reducing **electronic data interchange errors by 30%.**

PROJECTS

SmartGuard: Predictive Maintenance for industrial automation *August 2024- Sep 2024*

- Spearheaded a **cutting- edge predictive maintenance solution** to predict machine failures using **sensor data** and reduce operational costs through **early failure detection by 50%**
- Engineered an extensive set of features including sensor readings for **temperature, pressure, vibrations** and device type, and **operating conditions**. Developed a robust **Classification model using Azure and scikit-learn.**
- Deployed ML algorithms such **as Logistic Regression, KNN and XGBoost** with **XGBoost** achieving an impressive **accuracy score of 98.80 %** ensuring reliable machine failure prediction. Seamlessly integrated the model into **Azure Data factory**, and improved operational safety of up to **40%** achieved. here

Feedback Fusion: Enhancing Business Intelligence through Customer Sentiment Analysis *July 2024-August 2024*

- Developed a **sentiment analysis platform** that evaluate customer reviews on Amazon products to optimize product performance helping business side improve efficiency, leveraging **NLP techniques** such as stop words removal, special character filtering and lemmatization.
- Executed robust **data cleaning and preprocessing** of dataset employing advanced NLP methods to convert raw data into actionable insights. **Applied TF-IDF vectorization** and developed predictive model using **SVR, Random Forest and Logistic regression** with **SVR** achieving impressive **F1-score of 85%.** here

News Chatbot: OpenAI in Finance domain | Using LLM *June 2024-July 2024*

- Created a robust tool for equity research analysts using **LangChain and OpenAI API**, boosting research efficiency by **30%**. Leveraged **LLM techniques** for automated financial news analysis, enhancing research accuracy by **25%.**
- Applied **vector database embedding techniques,** improving query **precision** by **20%**. Developed a user-friendly **interface with Streamlit**, increasing user engagement and productivity by up to **40%**. here

SKILLS

Python | SQL | Data Analysis | Statistics | Machine Learning | Langchain | LLM | Tableau| Pandas | NLP | Azure | Gen AI

EDUCATION

K.K Wagh College of Engineering and Education research, Nashik | CGPA: 8.6 *2018-2022*

PUBLICATIONS

- Overfitting – The hidden enemy of predictive power.
- Teaching Machines to understand us- Power of NLP and Sentiment Analysis.