Hiren Patel

+91 7405526263 — hiren.patel728@gmail.com — linkedin.com/in/Hiren

Summary —

- **3+ years of experience** as a **Data Science Professional**, **Team Lead**, and **Lecturer** in the Computer Software industry, focusing on **Python, Machine Learning**, and data-driven solutions.
- Expertise in **Data Analytics, Data Visualization**, and developing **end-to-end data pipelines**, leveraging tools such as **Pandas, Scikit-learn, TensorFlow, and Tableau** to deliver actionable insights.
- Proven track record of leading cross-functional teams to deliver complex projects, including **real-time data monitoring platforms, predictive analytics, and business intelligence solutions** for enterprise-level organizations.
- Adept at designing and developing custom **dashboards and reports** using **Power BI, and Matplotlib** to enable accurate data-driven decisions.
- Strong communicator with a collaborative approach to working with stakeholders, ensuring alignment between business requirements and technical solutions.
- Bachelor's degree in **Computer Engineering** with certifications in **Data Analytics, Machine Learning**, and **Python Programming**, showcasing a commitment to continuous learning and innovation.

Skills

Data Science Tools	Pandas, NumPy, Scikit-learn, TensorFlow, Keras, Matplotlib, Seaborn	**Visualization Tools**	Tableau, Power BI, Plotly, Streamlit, Flask		MongoDB
Languages	Python, SQL, Java, C++, JavaScript	**Big Data and Cloud**	Hadoop, Spark, AWS (S3, EC2, Redshift), GCP (BigQuery)	**Other Skills**	Data Cleaning, Feature Engineering, Statistical Modeling, ETL Processes, Machine Learning, NLP
		Databases	MySQL, PostgreSQL,		

Experience

SSM Infotech Pvt. Ltd. , Surat **Sept 2023 – Present**

Business Analyst, Team Leader

Project: Petronet LNG Limited

- **Problem Statement:**
  - Before implementing the Real-Time Data Monitoring and Analysis Platform (RTDMAP) at Petronet LNG (PLL), operational data from the Dahej and Kochi plants had to be manually exchanged through phone calls or shared using Excel files. This fragmented approach was inefficient, given the geographical distance between Kochi in the south, Dahej in Gujarat, and the corporate office in Delhi.
  - The lack of a centralized, real-time data system made it challenging for the corporate office to access up-to-date information, resulting in delayed responses to critical issues. For instance, if a pump at one of the plants was operating at high efficiency and nearing failure, this information would not reach the corporate office promptly. Consequently, decisions requiring urgency were delayed, leading to potential operational inefficiencies, safety risks, and increased downtime.
  - PLL required a unified platform to collect, monitor, and analyze real-time data from its plants to enable faster decision-making, enhance operational oversight, and ensure plant efficiency and safety.
  - To address these challenges, proper networking infrastructure was established to enable seamless data integration. PI Interfaces were set up at the Dahej and Kochi plants, while a centralized PI Server was deployed at the corporate office in Delhi. This architecture ensured real-time data flow between the plants and the corporate office, allowing for immediate analysis and decision-making.
- **Objective:**
  - Developed a centralized platform to integrate real-time data from Dahej and Kochi plants, enabling actionable insights and efficient decision-making at the corporate office in Delhi.
- **Development:**
  - Created over 30 interactive dashboards and Reports for real-time operational insights.
- **Metrics Tracked:**
  - Monitored storage tank levels, sendout KPIs, pumps, Boil Off Compressors, STVs, SCVs, process flows, processing rates, and metering distributions.

Project: Uber Demand Forecasting

Problem Statement:

- Uber faced challenges in predicting ride demand accurately, leading to inefficient allocation of resources such as drivers and vehicles. This inefficiency impacted both operational costs and rider experience due to increased wait times and surge pricing.
- The lack of reliable demand forecasting models created issues in peak-hour resource allocation and underserved areas, leading to customer dissatisfaction and missed revenue opportunities.

Objective:

- Developed a machine learning-based demand forecasting model to predict ride demand accurately across different locations and time intervals.
- Enabled Uber to allocate resources efficiently, reducing wait times and enhancing the rider experience.

Development:

- Collected and preprocessed historical ride data, including location, time, weather conditions, and special events.
- Built and deployed predictive models using regression, time-series analysis, and deep learning techniques.
- Integrated forecasting insights into operational dashboards for real-time decision-making.

Metrics Tracked:

- Predicted demand across geographical regions with a high degree of accuracy (measured by RMSE and MAPE).
- Reduced average wait times by 20
- Enhanced rider satisfaction scores due to decreased surge pricing and optimized driver availability.

Project: GAIL

- **Problem Statement:**
  - Before implementing the Digital Logbook at GAIL, operators recorded asset data manually in control rooms or shared it via spreadsheets, resulting in delays, inaccuracies, and inefficiencies. The lack of real-time data validation and on-site logging made it challenging to ensure data accuracy and operational oversight.
- **Development:**
  - To address this, a centralized Digital Logbook was developed using SSM's in-house product, XStudio. The solution introduced GPS-based logsheet access, ensuring logs could only be filled when operators were in specific areas. Real-time validation for text fields was implemented, highlighting values outside expected ranges in red for immediate attention. Dashboards provided centralized visibility on the server, and automated daily report generation ensured timely sharing via email. This robust system improved data accuracy, streamlined workflows, and enhanced decision-making by leveraging advanced validation and monitoring capabilities.

TDEC **Apr 2022 – Sep 2023**

Sr. Lecturer

- Taught Advanced Machine Learning, Python, Computer Networking, Advance Java Programming Subjects
- Established respectful and inclusive classroom environments to help students learn and grow.
- Achieved a remarkable 100% student pass record by employing innovative teaching methods and providing personalized guidance.

SDCDE **Sep 2021 – Apr-2022**

Lecturer

- Taught Advanced JAVA Programming language
- Directed learning to achieve student engagement with material
- Methodically planned and executed on lesson plans, including collecting necessary resources to complete a given lesson.

Education

Gujarat Technological University
Bachelor of Engineering in Computer Engineering
Gujarat Technological University
Diploma Of Engineering in Computer Engineering

Certifications

- Aveva - CSI AVEVA PI Infrastructure Specialist Exam
- Aveva - CSI AVEVA PI Installation Specialist Exam
- GFG - Complete Data Science and Machine Learning Program
- Meta - Data Analytics
- Meta - Data Analytics with SQL
- ISRO - Geoprocessing Using Python
- KPMG - Data Analytics Internship
- Codebasics - Power BI Certification
- HackerRank - Python
- HackerRank - Java