PURAV PATEL

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SUMMARY

Senior Analytics Leader with a proven track record of delivering AI-driven insights and machine learning solutions to optimize operations and drive business impact. Expertise in Python, SQL, and predictive modeling to enhance decision-making across supply chain, customer sentiment, and business intelligence. Skilled in designing and deploying predictive models, automated analytics frameworks, and operational dashboards that drive measurable outcomes. An AI thought leader passionate about bridging business objectives with technical innovation, transforming data into strategic insights that enhance efficiency, revenue growth, and competitive advantage.

SKILLS

Leadership and Management	Cross-Functional Team Leadership, Stakeholder Alignment, Strategic Decision-Making, Agile Delivery, AI & Analytics Thought Leadership, Training & Upskilling
Business Intelligence & Data Analysis	Predictive Modeling, Business Metrics Development, Advanced SQL & Query Optimization, Data Visualization (Power BI, Tableau), Data Governance & Strategy
Machine Learning & AI Applications	Supervised & Unsupervised ML (Scikit-Learn, XGBoost), Natural Language Processing (spaCy, TextBlob, BERT), Large Language Models (OpenAI, LangChain), Time Series Forecasting (Prophet, ARIMA), Clustering & Segmentation
Technical Proficiency	Python (Pandas, NumPy, Matplotlib), SQL, Jupyter Notebook, AWS, API Integration, Data Pipeline Development, Streamlit Web App Development

WORK EXPERIENCE

Senior Order Fulfillment Analytics Manager, GE HealthCare, Glen Mills, PA **Jul 2021 - Present**

- Developed a machine learning model in Python (Scikit-Learn) that achieved 70% accuracy in predicting On-Time Delivery (OTD) for 4,500+ orders (~$500M portfolio), enabling proactive risk mitigation and operational efficiency improvements.
- Designed an advanced SQL & Python analytics model to assess Q3 order volatility, identifying $108M in delayed orders and $213M in expedited orders, helping senior leadership mitigate financial risk and improve forecasting.
- Built and deployed a predictive model in Python (Time Series/Regression) to forecast delivery dates with 74% accuracy for 1,000+ European orders ($200M+ in shipments), improving supply chain responsiveness and commitments.
- Engineered a Python-based solution to align aging inventory with open order demand, uncovering a $5M opportunity by optimizing inventory allocation across regions, sub-regions, and distribution orgs.
- Led a company-wide "AI in Business" training for 200+ professionals, driving AI adoption across operations, finance, and sales by demonstrating real-world AI applications in both professional and personal contexts.
- Established a comprehensive order fulfillment analytics hub for 100+ end users, centralizing dashboards, training materials, and operational guidelines for streamlined access.

Order Execution & Logistics Analytics Manager, GE HealthCare, Manhattan, NY **Jan 2019 - Jun 2021**

- Led multiple continuous improvement events to revamp OTD analytics: expanded automated defect reason codes from 4 to 50+, provided visibility to cross-functional defect relationships, and developed function specific analytics views.
- Supported logistics projects (Air to Ocean, Premium Reduction, Consolidations) by developing cost focused analytical views helping enable $2.5M in cost savings.
- Developed lead time analytical views to identify and rectify manufacturing lead time gaps improving adherence by 15%.
- Increased stakeholder engagement by 30% by implementing biweekly stakeholder engagement meetings, providing global training sessions, and developing operational and metrics manuals.

Logistics Analytics Product Owner, GE HealthCare, Hoboken, NJ **Oct 2016 - Dec 2018**

- Defined the data architecture for the new OTM (Oracle Transportation Management) data source and overhauled the existing data source by removing 70% of redundant code and reducing load time by 90%.
- Created global lead time standards for internal and external customer shipments by mining and modeling 5+ data sources (1M+ rows of data) leading to a change in 40% of inaccurate lead times.
- Managed multiple digital initiatives focused on logistics cost savings, forecasting expected costs, data quality standards, and training functional users on how to utilize the analytics insights to fulfill business objectives.

Logistics & Distribution Leader, GE HealthCare, Miami, FL **Aug 2014 - Sep 2016**

- Increased on time delivery by 16% by developing and implementing standard work with primary logistics carriers.
- Planned and executed ~130 Magnetic Resonance (MR) shipments inbound to Miami and outbound to Latin America.

Operations Management Leadership Development Program, GE HealthCare **Jul 2012 - Jul 2014**

- Directed production plan to bring Accessories production line on time delivery from 45% FW13 to 89% FW23.
- Implemented process standards in warehouse operations leading to a reduction of $1.1M in inventory.
- Executed 100% of Q2 production plan and reduced work-in-progress inventory by 30 MR Cabinets (~$1.5M ICV).

PROJECTS

Cardiovascular Disease Patient Clustering (Machine Learning), Link
- Applied unsupervised machine learning (K-means clustering) to segment cardiovascular patients based on key health indicators (blood pressure, cholesterol, glucose levels).
- Identified high-risk patient groups, enabling data-driven healthcare interventions, personalized treatment plans, and improved patient outcomes through targeted healthcare.

Sales Analysis and Forecasting for Automotive Industry, Link
- Conducted an advanced sales analysis using Python (pandas, matplotlib, seaborn) to identify regional dealership performance, best-selling car models, and emerging trends.
- Developed a time series forecasting model (ARIMA, Prophet) to predict future car sales, enabling inventory optimization, demand planning, and targeted marketing strategies.

Customer Sentiment Analysis from Amazon Product Reviews, Link
- Developed a Streamlit-based AI-powered sentiment analysis dashboard, extracting insights from Amazon product reviews using VADER, spaCy NLP, and BERT-based Aspect-Based Sentiment Analysis (ABSA).
- Analyzed customer satisfaction trends across 50+ top-selling products, enabling businesses to optimize product positioning, marketing strategies, and customer experience improvements.

Telecommunications Customer Churn Analysis, Link
- Built a machine learning model (logistic regression, decision trees, and ensemble methods) to predict customer churn for a telecommunications company, identifying key factors driving customer retention and attrition.
- Designed an interactive Streamlit dashboard, allowing stakeholders to visualize churn patterns, customer segmentation insights, and revenue impact, enabling proactive retention strategies.

Retail Supply Chain Sales Analysis & Forecasting, Link
- Conducted an end-to-end retail sales analysis using Python (pandas, matplotlib, seaborn) to uncover regional sales trends, high-performing products, and seasonal demand fluctuations, enabling data-driven inventory planning and pricing strategies.
- Developed a time series forecasting model (ARIMA, Prophet) to predict future retail sales, empowering businesses to optimize stock levels, prevent inventory shortages, and enhance revenue forecasting accuracy.

Interactive Exploratory Data Analysis (EDA) Application, Link
- Created a self-service, interactive EDA application in Streamlit, allowing users to upload datasets, perform instant visual analysis, and uncover patterns, correlations, and anomalies.
- Integrated automated profiling tools (ydata-profiling, pandas-profiling) to generate actionable insights in real-time, reducing manual data exploration time by 70% and improving decision-making efficiency.

EDUCATION

Quantic School of Business and Technology - *Executive MBA, Business Administration* **Sep 2022 - Nov 2023**

Pennsylvania State University - *Bachelor of Science, Industrial Engineering* **Aug 2007 - May 2012**