

TIRTH PATEL

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PROFILE

- A **proactive data analyst** with 2+ years of experience leveraging data analytics and predictive modeling in the retail industry. Passionate about translating complex data into actionable insights to drive strategic decisions and business growth.
- **Programming Languages:** SQL, Python, R | Others: Tableau, Excel, Data Analysis, Data Mining, Statistics, Cloud (GCP/AWS/Azure), Scikit-learn, Machine Learning, ETL, Git, Minitab, SAS EM, Hadoop, Hive, Apache Spark.
- **Certifications:** **IBM Certified Data Analyst**, Azure AI Fundamentals, Machine learning with Python, Foundations: Data, Data Everywhere, Convolution Neural Networks, The Complete Python 3 Course: Beginner to Advanced.
- **Competencies:** Predictive Analysis, **Statistical Analysis**, Machine Learning, **A/B Testing**, NLP, Dashboarding & Storytelling, Team Management, AI Agents, LLMs, **Prompt Engineering**, ETL.

EDUCATION

Purdue University, Daniels School of Business

Master of Science in Business Analytics and Information Management – Vice President

West Lafayette, IN

August 2025

NMIMS University

Master of Business Administration

Mumbai, India

May 2022

NMIMS University

Bachelor of Technology, Information Technology

Mumbai, India

May 2022

PROFESSIONAL EXPERIENCE

Prediction Guard

AI Engineer

West Lafayette, IN

January 2025 - Present

- Developed and deployed **GenAI** sales agents using **LangChain** and Prediction Guard **APIs**, automating outreach and lead qualification to reduce manual effort and scale outreach volume by 2x–3x.
- Built a synthetic dataset with persona-level transcripts and lead classifications to train and benchmark **LLM-based agents** for real-world sales scenarios.
- Designed and tested an AI-driven **sales pipeline** that reduced cost per qualified lead from \$50–\$200 to under \$0.03 and decreased sales cycle time from 13 hours to 4 hours.
- Presented simulation findings at **INFORMS** and **MWDSI**, highlighting trade-offs between AI autonomy and human oversight for responsible enterprise AI adoption

Lake Shore

Data Analyst

Mumbai, India

June 2022 – May 2024

- Optimized leasing operations by building **automated dashboards** and streamlining data workflows, reducing processing time for over 600 tenant records by 40%.
- Partnered with the Investments team to create scenario-based **financial models**, improving budget accuracy and driving strategic planning.
- Conducted profitability analysis and **predictive modeling** to identify underperforming assets, leading to targeted removals and a 30% boost in asset income.
- Built interactive **KPI** dashboards tracking lease status, occupancy, and revenue trends, enabling early detection of operational inefficiencies

Hospitality Minds

Marketing Analyst Intern

Mumbai, India

May 2021 – September 2021

- Conducted competitor and market analysis to uncover strategic positioning opportunities, driving acquisition of new B2B clients.
- Built **Power BI** dashboards and executed optimization campaigns, resulting in a 26% increase in cross-platform brand visibility.

ACADEMIC PROJECTS

- **Customer Segmentation & Campaign Optimization** - Segmented 2.5M+ customers using **K-Means**, achieving a 20% improvement in targeted marketing. Predicted coupon redemption with 84% accuracy (AUC: 0.86) using **GBT**.
- **Sentiment Analysis on Customers Reviews**– Built and optimized a Random Forest Classifier in Python to analyze sentiment in Amazon Alexa customer reviews, attaining 91% accuracy through NLP techniques.

LEADERSHIP ACTIVITIES, AFFILIATIONS, HONORS

- **Vice President** of the MS-BAIM Program at Purdue University. Leading a cohort of 98 graduate students since 2024.
- Secured **1st nationally and 2nd on Kaggle**, for the NCAA Crossroads competition, outperforming 111 teams and 450 students nationwide; presented key findings through interactive Tableau dashboards analyzing customer affinity to schools in March Madness bracket predictions.
- Secured **2nd place** at INFORMS 2025 Poster Competition for presenting research on **AI agents in B2B sales pipelines**.