

Priyal Shah

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EDUCATION

Carnegie Mellon University, Pittsburgh PA 08/2024 - 12/2025

Master of Information Systems Management

Coursework: Data Focussed Python, Data Science for Product Managers, Database Management, Financial Analytics, Managing Disruptive Technologies, Time Series Forecasting, Decision-making under Uncertainty

University of Mumbai, Mumbai, India 12/2020 - 06/2024

Bachelor of Technology in Computer Engineering

Coursework: Data Mining and Warehouse, Artificial Intelligence, Machine Learning, Statistics, Business Communication

PROFESSIONAL EXPERIENCE

Data Science Intern, Miscot Systems, India 06/2023 - 07/2023

- Automated ETL error-handling framework in **Python (Pandas, NumPy)**, reducing manual intervention by 70% and enhancing data accuracy from 80% to 95%, leading to a 20% reduction in processing time
- Optimized **SQL** queries, cutting execution time by 40%, while accelerating ML deployment by 30% via **Docker** and collaborating with cross-functional teams to generate data-driven business recommendations
- Spearheaded development of interactive **Power BI** dashboards with advanced **data visualization**, transforming customer behavior analysis and accelerating reporting cycles by 30%, communicating insights to stakeholders

ACADEMIC PROJECTS

Customer Churn Prediction and Clustering, Carnegie Mellon University 01/2025 - 02/2025

- Generated a **Machine Learning pipeline** leveraging **Random Forest**, **Logistic Regression**, and **K-Means clustering** algorithms that identified high-risk customers with 87% accuracy, improving prediction precision by 32%
- Implemented **Naïve Bayes** and multi-class **Support Vector Machine** algorithms to predict ratings across 6K reviews

ClimaTrip: Smart Travel Planner, Carnegie Mellon University 01/2025 - 02/2025

- Designed a **Python** based recommendation system leveraging statistical analysis of historical climate data, **web-scraping** tourist information, and OpenWeather **API** to deliver travel insights based on user preferences
- Streamlined an efficient **ETL pipeline** with automated caching mechanisms using **BeautifulSoup** and **Pandas**, optimizing data extraction from 4 sources while maintaining data quality and integrity

Sales Performance Analysis Dashboard 10/2024 - 11/2024

- Architected an interactive **Power BI dashboard** analyzing sales data for **data reporting**, revealing 5+ key **customer behavior patterns** and uncovering potential revenue opportunities
- Engineered sophisticated data models using **Power Query** and advanced **DAX** formulas on 178K transactions, highlighting top-performing and loss-making products to drive data-driven pricing and inventory decisions
- Monitored critical **KPIs**, revealing that the Consumer Segment contributed to 51.48% of total revenue, calling for targeted marketing initiatives to elevate engagement

SKILLS

Programming and Cloud: Python, SQL, R, Docker, Git, Microsoft Azure

Data Analysis Tools: PowerBI, Tableau, MS Excel, Alteryx, Looker, DAX, VBA

Machine Learning and Artificial Intelligence: Scikit-Learn, TensorFlow, Time Series Analysis, Marketing Analytics

Data Engineering and Databases: ETL Pipelines, Apache Airflow, MySQL, PostgreSQL, Snowflake, Databricks

Python Libraries: Pandas, NumPy, Matplotlib, Seaborn, Plotly, BeautifulSoup, MATLAB

LEADERSHIP EXPERIENCE

Vice President, Society for Data Science Club - S4DS, University of Mumbai 09/2022 - 09/2023

- Mobilized a cross-functional team of 100+ peers to design 7 data-centric events, resulting in 500+ attendees
- Pioneered LLM-powered report generation system, boosting summary quality by 30% for departmental analytics