Pratham Sharma

Toronto, ON | (365) 275-3191 | prathams2425@gmail.com | LinkedIn | GitHub | Portfolio Website

WORK EXPERIENCE

Four Seasons Hotels and Resorts

Toronto, ON

Data Scientist

Jul 2025 - Present

- Supported the development of **recommendation models** to advance personalization initiatives within guest experience and guest recognition programs.
- Conducted **exploratory analysis of call transcript text data** and built a baseline **NLP model** to identify call topics, supporting future initiatives in guest experience and service optimization.

Trillium Health Partners

Mississauga, ON

Data Scientist

Sep 2023 - Jul 2025

- Architected and implemented an **end-to-end ML pipeline** to ingest data via **SQL Server**, generate forecasts using forecasting models, and communicate results to operational teams using **Power BI and SSRS** reports
- Implemented SARIMAX and Dynamic Regression-based forecasting models to predict daily ED visits with 4% MAPE, helping operational teams allocate nursing staff based on predicted surges in patient volume
- Drove a 12% reduction in ED wait times (from 4.2 hours to 3.7 hours) by integrating forecasting models into existing operational processes for nursing staff allocation
- Designed an interactive What-if analysis dashboard integrating multiple predictive models, enabling leadership to simulate performance outcomes under varying operational conditions
- Led the development of **7 Power BI dashboards** used by 50+ stakeholders across multiple departments, showcasing trends in KPIs and providing insight into hospital operations and performance
- Boosted data model efficiency by 30% by utilizing the snowflake schema to develop advanced data models supporting the development of interactive dashboards

Data Analytics Co-op

May 2023 - Aug 2023

- Created a comprehensive **Power BI dashboard** to track organizational performance across 63 KPIs
- Improved data quality by 38% by implementing automated data quality and integrity checks using Python, leading to accurate dashboard reporting
- Maintained technical documentation for 5 data models and dashboards, and over 50 KPI definitions and calculations, ensuring consistency across dashboards and reports

RedCarpetUp.com

New Delhi, India

Data Analyst Intern

Jan 2022 - Jun 2022

- Developed and optimized **5**+ **ETL pipelines using Apache Airflow** to make high quality data available for A/B testing, as well as to automate standard reporting requests and other tasks
- Reduced the time taken to detect fraudulent activity by 56% (from 2.5 hours to 1 hour) by implementing statistical algorithms to identify anomalies in financial transactions
- Utilized **PostgreSQL** to extract data for the creation of interactive dashboards using **Apache Superset**, conveying actionable insights

TOP SKILLS

Data Science Tech Stack: Python, PySpark, R, SQL, Azure Databricks, Microsoft Azure, Power BI Frameworks & Libraries: Pandas, NumPy, Scikit-Learn, Matplotlib, Seaborn, TensorFlow, MLflow Techniques & Concepts: Machine Learning, Time Series Analysis, Natural Language Processing, Recommendation Systems, Statistical Modeling, Hypothesis Testing, Data Warehousing, Data Pipelines Other Tools: Git, Microsoft Fabric, Tableau, Azure Machine Learning, Azure Data Lake, Apache Airflow

EDUCATION

University of Western Ontario

London, ON

Master of Data Analytics | GPA:3.95

Vellore Institute of Technology

Vellore, TN, India

Bachelor of Technology, Computer Science & Engineering | GPA: 3.86