Pratham Sharma

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💼 - prathamSharma25 | ⭘ - prathamSharma25 | 🌐 - Portfolio Website

TOP SKILLS

Programming Languages: Python, R
Databases & DBMS: PostgreSQL, Microsoft SQL Server, MySQL, MongoDB
Libraries & Tools: Microsoft Power BI, Pandas, NumPy, Scikit-Learn, SciPy, TensorFlow, OpenCV
Technologies & Industry Knowledge: Git, Machine Learning, Natural Language Processing, Computer Vision, Statistical Modeling, Hypothesis Testing, Microsoft Azure, Apache Airflow, Microsoft Office

WORK EXPERIENCE

Decision Support Analyst   September 2023 - Present
Trillium Health Partners   *Mississauga, ON, Canada*

Daily Emergency Department Visits Prediction (Proof of Concept)
- Performed **data cleaning** and **feature engineering** to create a dataset of daily ED visits for the past 18 months
- Implemented **Poisson regression** and **dynamic regression** models to predict the number of ED visits per day
- Achieved an **MAPE** of **10.4%** using the Poisson regression model, and **11.7%** using the dynamic regression model

Dashboard Development
- Extracted, transformed, and combined data from multiple sources using **Microsoft SQL Server** to create datasets for organizational KPIs
- Developed **data models** using the **snowflake schema** to support the development of dashboards and reports
- Created a **Power BI** dashboard to display trends in organizational KPIs and convey key insights to stakeholders
- Maintained technical documentation for data models, dashboards, and indicator definitions and calculations

Data Analytics Co-op Student   May 2023 - August 2023
Trillium Health Partners   *Mississauga, ON, Canada*

- Developed a data visualization dashboard using Microsoft Power BI for organizational performance management covering 63 KPIs
- Implemented data quality and integrity checks using **Python** and **Pandas** on data for 2 data visualization dashboards
- Conducted training sessions to introduce the Python programming language to Decision Support Advisors

Data Analyst Intern   January 2022 - June 2022
RedCarpetUp.com   *New Delhi, India*

- Developed and maintained **ETL data pipelines** using **Apache Airflow** to make high quality data available for A/B testing
- Implemented **statistical algorithms** to detect anomalies in financial transactions, leading to a **56% decrease** in time taken to detect and flag anomalies
- Extracted data using **PostgreSQL** to create data visualization dashboards using **Apache Superset**

EDUCATION

Master of Data Analytics   September 2022 - August 2023
Western University   *London, ON, Canada*

Bachelore of Technology, Computer Science & Engineering   July 2018 - May 2022
Vellore Institute of Technology   *Vellore, TN, India*

PROJECTS

Hurricane Damage Prediction using CNNs - GitHub   April 2023
A deep learning model to identify areas damaged by hurricanes
- Developed an **image processing** algorithm to pre-process images using Canny edge detection, erosion, and Gaussian blur algorithms
- Implemented a CNN model to identify areas that show hurricane damage achieving a **93% accuracy on test set**
- Achieved a **25% reduction in model complexity** as compared to the pre-trained VGG-16 model