

Vidhi's Individual Contribution

Hi Professor,

I conducted exploratory data analysis (EDA) to identify trends and anomalies in the syringe request data, including inconsistencies like mismatched closure information and time-based spikes in requests. To support visual storytelling, I built interactive visualizations highlighting request volume, resolution times, and location hotspots. These visualizations were designed to help stakeholders easily interpret the data. On the modeling side, I developed a SARIMA time series model to forecast future syringe requests and experimented with regression models to analyze factors influencing resolution times. Based on these insights, I contributed to drafting policy recommendations aimed at improving response efficiency and optimizing resource allocation. Overall, my work focused on enabling data-driven decisions to support Boston's public health efforts.

Best,

Vidhi Rajeshbhai Mistry

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