Graph and Description

The result interface effectively displays the uploaded air quality dataset, showcasing PM2.5, PM10, and AQI values in both tabular and graphical formats. The dynamic table offers a detailed view of each data entry, while the line chart provides a clear visual comparison of pollutant trends across samples. This visualization helps users quickly identify fluctuations and patterns in pollutant levels, enabling easier interpretation of air quality conditions. The combination of tabular and graphical representation enhances user comprehension and supports data-driven decision-making in environmental monitoring tasks.

Table

| **Model** | **High Accuracy** | **Low Error (MSE, RMSE)** | **Fast Training Time** | **Model Simplicity** | **Good Generalization** | **Scalability** |
| --- | --- | --- | --- | --- | --- | --- |
| **Jaya Optimization** | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| Linear Regression | ✖ | ✖ | ✔ | ✔ | ✖ | ✔ |
| Random Forest | ✔ | ✔ | ✖ | ✖ | ✔ | ✔ |
| SVR (SVM Regression) | ✔ | ✖ | ✖ | ✔ | ✔ | ✔ |
| Neural Network (MLP) | ✔ | ✔ | ✖ | ✖ | ✔ | ✖ |