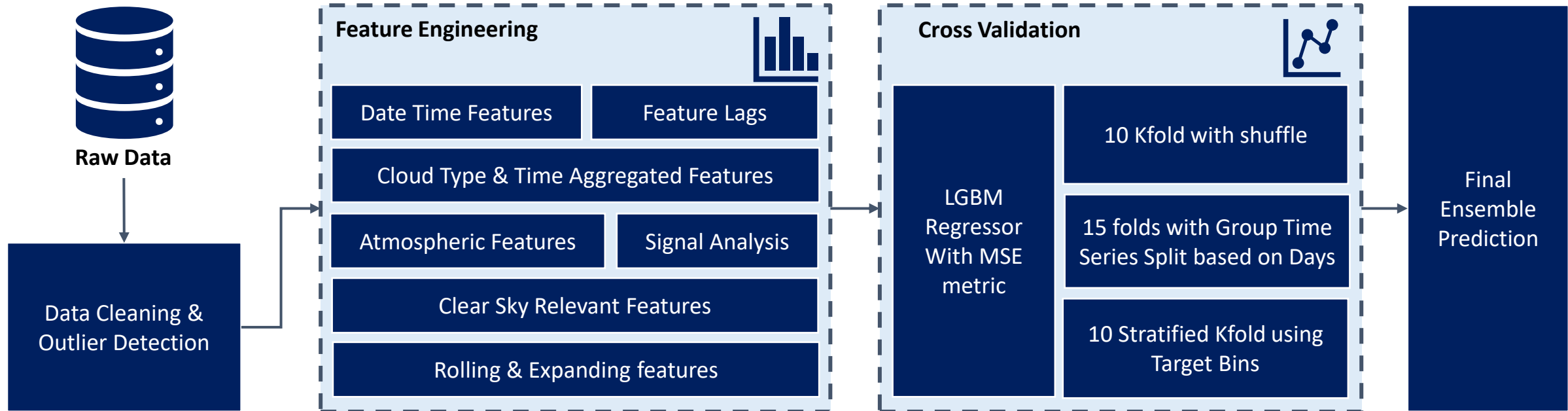


# RANK 1<sup>st</sup> SOLUTION APPROACH

Wipro's Sustainability Machine Learning Challenge - 2022



## Insights

- ✓ Seasonality & Trends across Days for the Clear sky helped me come up with Cross Validation strategy using Group Time Series Split based on Day (Year was also fine, though Day gave much better results)
- ✓ Feature Engineering using relevant Clear sky metrics such as Temperature, Transmittance, airmass etc helped to provide much more context on Clear sky calculations.
- ✓ Signal analysis for peaks within the day gave a clear indication.
- ✓ Feature engineering using Lags, Rolling & Expanding statistics are the base for any time series forecasting problem.
- ✓ Final Predictions are based on ensemble of different cross validation strategy using LGBM as the base model.